



ILLINOIS ENVIRONMENTAL PROTECTION AGENCY

1021 NORTH GRAND AVENUE EAST, P.O. BOX 19276, SPRINGFIELD, ILLINOIS 62794-9276 • (217) 782-3397

JB PRITZKER, GOVERNOR

JAMES JENNINGS, INTERIM DIRECTOR

217/524-3301

Certified Mail

Return Receipt Requested

JUL 24 2024

9589 0710 5270 0389 7077 26

GFL Environmental, Inc.
Mr. Matthew Coulter
4700 N Sterling Ave.
Peoria, Illinois, 61615

Re: 1438120003 -- Peoria County
Peoria Disposal Company
ILD000805812
Log No. B-24R2
RCRA Administrative Record – 24D

Dear Mr. Coulter:

Attached is a draft renewed Resource Conservation and Recovery Act (RCRA) Hazardous Waste Management permit (draft permit) and fact sheet for the above-referenced facility. 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 Title 35 Illinois Administrative Code (35 Ill. Adm. Code) 705.144.

Under the provisions of 35 Ill. Adm. Code 705.141(d), the draft permit, and administrative record must be publicly noticed and made available for public review and comment. The Illinois EPA must also provide an opportunity for a public hearing. Copies of the draft permit, fact sheet, and renewal permit application are available for review at the Peoria Public Library; Business, Science and Technology Department; Government Documents Section, located at 107 NE Monroe Street, Peoria, Illinois 61602. The Illinois EPA has not scheduled a public hearing at the current time. However, any interested party may request a public hearing. The public comment period will close on September 9, 2024.

During the comment period, the applicant or any interested party may submit comments to the Illinois EPA on the draft permit. At the close of the comment period, the Illinois EPA will prepare a response to significant comments. Comments on the draft permit may be submitted to:

Sarah Brubaker, Office of Community Relations (#5)
Illinois Environmental Protection Agency
1021 North Grand Avenue East
Post Office Box 19276
Springfield, Illinois 62794-9276

2125 S. First Street, Champaign, IL 61820 (217) 278-5800
115 S. LaSalle Street, Suite 2203, Chicago, IL 60603
1101 Eastport Plaza Dr., Suite 100, Collinsville, IL 62234 (618) 346-5120
9511 Harrison Street, Des Plaines, IL 60016 (847) 294-4000

595 S. State Street, Elgin, IL 60123 (847) 608-3131
2309 W. Main Street, Suite 116, Marion, IL 62959 (618) 993-7200
412 SW Washington Street, Suite D, Peoria, IL 61602 (309) 671-3022
4302 N. Main Street, Rockford, IL 61103 (815) 987-7760

THE UNIVERSITY OF CHICAGO

1950

THE UNIVERSITY OF CHICAGO
DEPARTMENT OF CHEMISTRY
RESEARCH REPORT NO. 100
BY
J. H. GOLDSTEIN AND
R. F. W. WILSON
DECEMBER, 1950

1438120003-Peoria Disposal Co.

Log No. B-24R2-Draft

Page 2

The Illinois EPA will issue a final renewed RCRA permit after the close of the public comment period unless the Illinois EPA decides to reverse the tentative decision. The appeal process and limitations are addressed in 35 Ill. Adm. Code 705.212.

Any questions concerning this draft permit, please contact Kelly Huser at 217/524-3867. Any groundwater specific questions, please contact Gabe Kammel-O'Donnell at 217/524-7922.

Sincerely,



Jacqueline M. Cooperider, P.E.

Permit Section Manager

Bureau of Land

JMC: KDH: 1438120003-RCRA-B24R2-draft.docx

KDH TNH se

Attachments: Fact Sheet

Draft Renewed RCRA Permit

cc: Kris Thompson, GFL Environmental, Inc.

FACT SHEET
for
DRAFT RENEWED RCRA PERMIT
Peoria Disposal Company
Peoria Illinois
STATE ID NO. 1438120003
FEDERAL ID NO. ILD000805812
RCRA PERMIT LOG NO. B-24R2

This fact sheet has been prepared pursuant to the requirements of Title 35 Illinois Administrative Code (35 Ill. Adm. Code) 705.143. The fact sheet is intended to be a summary of the principal facts and significant factual, legal, methodological, and policy questions considered in preparing a draft renewed Resource Conservation and Recovery Act (RCRA) permit (draft permit). This draft permit requires Peoria Disposal Company (PDC) to continue to operate and maintain its hazardous waste management facility as discussed in this fact sheet. Pursuant to 35 Ill. Adm. Code 705.143(a), this fact sheet is sent to the applicant and to any other person who requests it.

I. INTRODUCTION

The draft permit for PDC contains all standard conditions required by 35 Ill. Adm. Code Parts 702, 703, and 724; and the applicable conditions of 35 Ill. Adm. Code Part 724 for all regulated units at the facility. PDC conducts a variety of hazardous and solid waste management operations, including storage in tanks, containers, storage building, and surface impoundment and treatment in tanks. PDC previously conducted disposal in landfill units; however, these landfill units no longer accept waste, have been properly closed, and are now regulated under the post-closure care requirements of the draft permit. Currently, PDC is not treating hazardous waste. The original hazardous waste management permit was issued to PDC on September 30, 1987 and expired on November 4, 1997. Since PDC submitted a timely application for renewal, the original permit remained effective until the first renewed permit became effective on January 1, 2008, which expired on January 1, 2018. Since PDC submitted a timely application for the second renewal, the first renewed permit remained effective, while review was conducted for this second renewed permit. PDC became a subsidiary of GFL Environmental, Inc. on October 1, 2021.

No new capacity, hazardous waste units, or hazardous waste management operations are proposed as a part of this draft permit. PDC is permitted to receive non-hazardous waste from off-site generators for treatment. To continue treatment of hazardous waste, PDC is required to submit a new Waste Analysis and Treatment Plan to the Illinois EPA for approval. All landfill areas are now closed and are under post-closure care at the facility.

II. DESCRIPTION OF FACILITY

A. General

The PDC facility is located at 4349 Southport Road, Peoria, Illinois. It is a commercial facility involved in storage of hazardous waste, treatment of non-

hazardous waste, and post-closure care of closed landfill areas involved in hazardous and solid waste management. The facility was previously permitted to treat hazardous waste.

The permitted facility encompasses approximately 120 acres, of which about sixty-four (64) acres were permitted for hazardous waste disposal. The purpose of the draft permit is to require that all hazardous waste management units (HWMUs) are managed in accordance with all applicable rules and regulations. The draft permit covers such areas as design and construction of the units, operating procedures, inspection schedules, procedures to prevent hazards, contingency plans, employee training, groundwater monitoring, plans for the closure of units where management operations have ceased, and plans for post-closure care of the units where waste is left in place. A facility diagram is provided at the end of this fact sheet.

B. Site Description and Location

The PDC facility comprises a part of the Southwest Quarter of Section Twenty-five (25) and a part of the Northwest Quarter of Section Thirty-six (36) in Township Nine (9) North, Range Seven (7) East of the Fourth Principle Meridian, Peoria County, Illinois. The PDC facility is located approximately one (1) mile south of the intersection of West Reservoir Boulevard and Southport Road near Pottstown, Illinois.

III. HAZARDOUS AND NON-HAZARDOUS WASTE MANAGEMENT ACTIVITIES

The Permittee conducts hazardous and solid waste management activities in one (1) container storage unit, one (1) storage tank, one (1) treatment tank, one (1) storage building, one (1) surface impoundment, and seven (7) closed landfill areas. The Permittee is also permitted for up to fourteen (14) additional storage tanks that may be constructed in the future. The Permittee is not treating hazardous waste; however, the storage of hazardous waste is permitted.

Previously, PDC received hazardous waste from off-site waste generators, ensured that the waste met the facility's acceptance criteria, treated the waste when necessary to meet the Land Disposal Restrictions (LDRs) pursuant to 35 Ill. Adm. Code Pat 728, and then disposed of the waste off-site. Currently PDC is only treating non-hazardous waste at the site and then it is shipped off-site for disposal. Leachate from the closed hazardous waste landfill and non-contact stormwater runoff is collected in the surface impoundment. The landfill and surface impoundment are further equipped with leak detection systems to help ensure that contaminated water (leachate) does not escape through the liner system into the underlying soils. Groundwater beneath the facility is monitored to ensure that it is not impacted by the operations at the site. More specific information about each section of the draft permit is presented below.

A. Containers

Section II of the draft permit contains conditions for proper management of containers in accordance with the procedures and operating specifications. PDC may store up to ten (10) roll-off containers (maximum total containment volume 137.8 cubic yards) of non-hazardous waste prior to treatment and/or awaiting disposal in the container storage/staging area located north of Runoff Retention Basin 1.

B. Tank Systems

Section III of the draft permit contains conditions for proper management of tanks in accordance with the procedures and operating specifications; and constructing, operating, and maintaining the containment system in accordance with the design plans and operating specifications. The Permittee has constructed one (1) hazardous waste storage tank to date (Tank T-4). This tank is used for storage of up to 20,000 gallons of leachate withdrawn from the hazardous waste landfill. The Permittee has also constructed one (1) hazardous waste treatment tank (Stabilized Base Mixer); however, the tank is only used for the treatment of non-hazardous waste. This tank was previously used for stabilization of up to 8.7 cubic yards of hazardous waste per batch prior to disposal. The treatment of hazardous waste ended on January 1, 2020. The Permittee can construct up to an additional fourteen (14) tanks as described in Section III of the draft permit and the approved renewal permit application.

C. Containment Building

Section IV of the draft permit contains conditions for proper management of containment buildings in accordance with the procedures and operating specifications. A containment building, known as the Waste Stabilization Facility, is permitted for storage of hazardous waste and storage and treatment of non-hazardous wastes by solidification. The Permittee is not allowed to treat hazardous waste. Four (4) storage bays for incoming non-hazardous waste contain a maximum of eighty-eight (88) cubic yards. After treatment in the Stabilized Base Mixer, the waste is moved to the curing area, which contains a maximum of 770 cubic yards of treated waste. The containment building is constructed with a liner system, leachate collection sumps, and a leak detection system.

D. Surface Impoundment

Section V of the draft permit contains conditions for proper management of the surface impoundment in accordance with the procedures and operating specifications. A surface impoundment, known as Runoff Retention Basin 1 (RRB1), contains a maximum of 2.2 million gallons of stormwater runoff and leachate from the hazardous waste landfill. Since the stormwater has come in contact with the leachate, the stormwater is considered leachate, and is managed as a hazardous waste. Leachate from RRB1 is treated in the on-site hazardous wastewater treatment plant,

which is separately permitted by the Illinois EPA's Bureau of Water and is then discharged to the Greater Peoria Sanitation District. RRB1 is lined with two synthetic liners with leak detection between the primary and secondary liner. In addition, RRB1 is located over a 3-foot layer of low-permeability soil material.

E. Post-Closure

Section VI of the draft permit contains conditions for proper management of the landfill unit in accordance with the procedures and operating specifications. A hazardous waste landfill consisting of seven (7) landfill areas (Barrel Trench Area, Section A, Section B, Trench C-1, Trench C-2, Trench C-3, and Trench C-4) operated by PDC is now closed and is subject to post-closure care. The closed landfill areas comprise approximately sixty-four (64) acres of the facility. The units have a total waste capacity of approximately 2,638,580 cubic yards. Two (2) closed areas (Barrel Trench Area and Section A) are constructed over compacted soil liners. A third closed area (Section B) contains a synthetic liner with a leachate collection system over a compacted soil liner. All remaining landfill areas (Trenches C-1 through C-4) have two (2) synthetic liners with leachate collection and leak detection over a compacted soil liner.

In addition, Section VI of the draft permit contains conditions for post-closure care maintenance, monitoring, and recordkeeping of all units where waste is left in place after closure. The post-closure care period for the closed landfill began on January 7, 2014 when final closure was approved for the last disposal area at the facility. The post-closure care period will continue for a minimum of (30) years after that date. The facility will be required to continue with post-closure care, through a permit modification request to extend the post-closure care period, as long as hazardous waste and risks associated with the waste remain in place at the facility. Groundwater monitoring will continue until post-closure care certification has been issued. Inspections during this period must identify any maintenance needed. The integrity of the final cover system, including soil and membrane caps, and vegetation must be maintained. A detailed written record of activities performed must be kept at the facility.

F. Groundwater Monitoring

Sections VII and VII-A of the draft permit contain conditions for groundwater monitoring to allow for the detection of any releases from the landfill that could potentially impact the uppermost aquifer. The facility has twenty-three (23) existing wells to monitor the groundwater in the uppermost aquifer: eighteen (18) downgradient wells and five (5) upgradient wells. Groundwater parameters monitored in the uppermost aquifer below the facility indicate, at the present time, no impacts have occurred; therefore, a groundwater detection monitoring program (GDMP) meeting the requirements 35 Ill. Adm. Code 724.198 shall be implemented. In addition to the GDMP, the facility has six (6) existing wells to monitor

groundwater in the shallow groundwater zones at the facility. Therefore, a shallow zone groundwater observation monitoring program must be implemented and is intended to detect any releases from the landfill to the shallow groundwater zone that could potentially impact the uppermost aquifer at the facility.

G. Corrective Action

Section XI of the draft permit imposes conditions requiring corrective actions for any release that might occur from solid waste management units or areas of concern at the facility. As part of PDC's corrective action requirements, they must inspect and maintain the cover over a solid waste management unit known as the Pre-RCRA Landfill under the post-closure care requirements of this permit.

IV. STANDARD PERMIT CONDITIONS

Section VIII of the draft permit contains standard conditions that are regulatory requirements of 35 Ill. Adm. Code Parts 702, 703, and 724. The standard conditions are of a general nature and are applicable to all hazardous waste management facilities regulated pursuant to an Illinois EPA RCRA permit. These conditions include the effectiveness of the permit, permit actions, permit severability, permit expiration, monitoring, retention of records, permit transfer and compliance schedules.

V. CONSIDERED ACTIONS OTHER THAN RCRA

- A. The air emissions from a hazardous waste management facility are regulated under RCRA, the Clean Air Act (CAA), the Illinois Environmental Protection Act, and State regulations at Title 35: Environmental Protection, Subtitle B: Air Pollution. Under these regulations, it is required to obtain a permit to install or operate any process which is, or may be, a source of air pollutants. PDC has a lifetime operating permit for sources for air emissions (Title V Air Permit No. 82020021).
- B. Discharge of any waste from a hazardous waste management facility into the water of the State, is required to have National Pollutant Discharge Elimination System (NPDES) permit, issued by the Illinois EPA under Section 39(b) of the Illinois Environmental Protection Act. PDC has a NPDES General Stormwater Permit (NPDES Permit No. IL0064777).

VI. PROCEDURES FOR REACHING A FINAL DECISION

Pursuant to 35 Ill. Adm. Code 705.162(a)(2), the public is given at least forty-five (45) days to review and comment on the draft permit conditions prior to the Illinois EPA taking any final permitting action on the application for this draft permit. The comment period will begin on July 26, 2024, the date of publication of the public notice in a major local newspaper of general circulation. The comment period will end on September 9, 2024.

Copies of the permit application, draft permit, and fact sheet are available for review at:

Peoria Public Library; Business, Science and Technology Department
Government Documents Section
107 NE Monroe Street
Peoria, Illinois 61602
309-497-2000

The administrative record contains the permit application, draft permit, fact sheet, and other supporting documents and correspondence submitted to the Illinois EPA. The administrative record can be made available for public inspection by appointment only at the Illinois EPA's Springfield headquarters from 9:00 a.m. to 5:00 p.m., Monday through Friday. Inspections of the administrative record must be scheduled in advance by contacting Ms. Sarah Brubaker of the Illinois EPA at the address listed below.

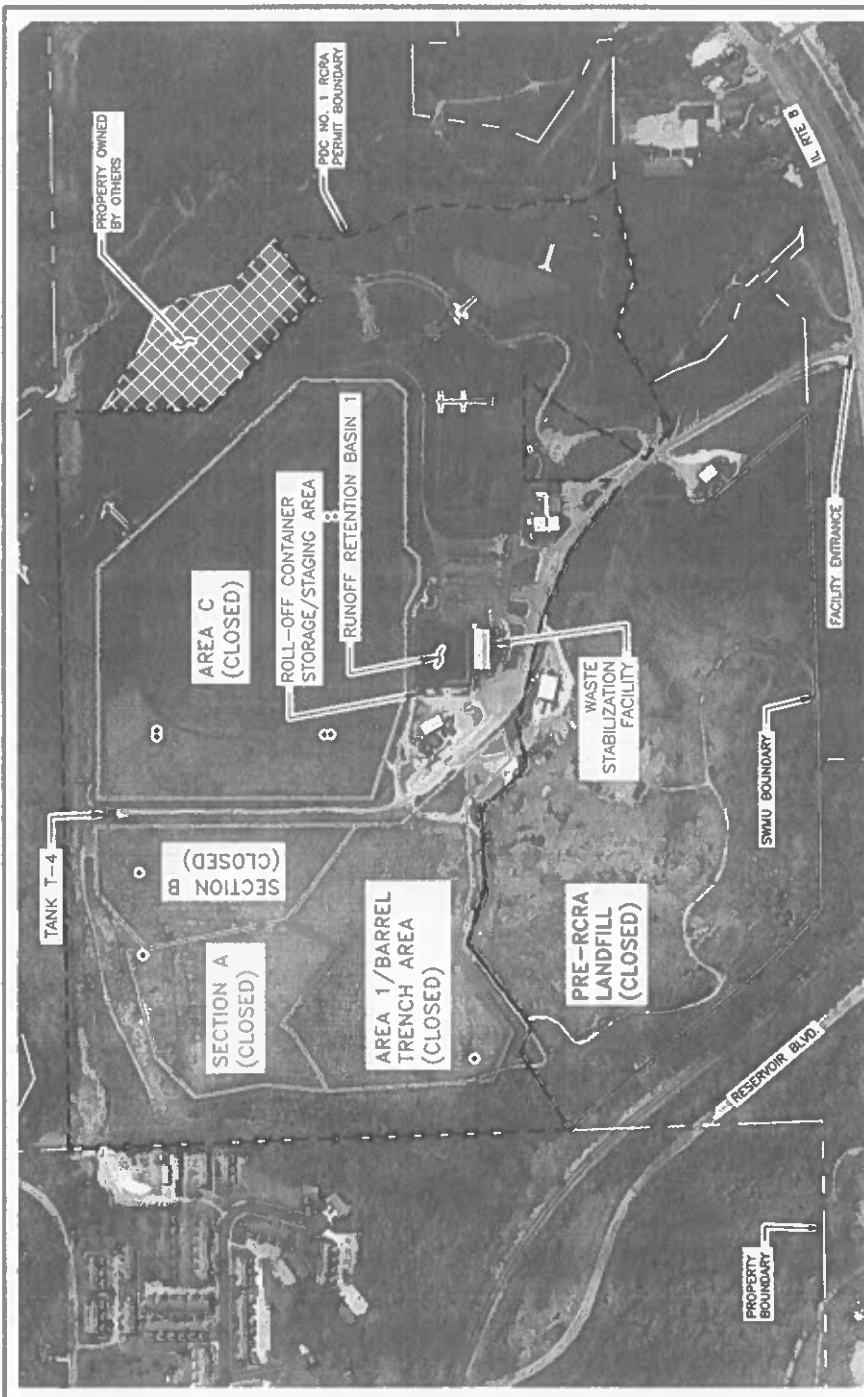
In response to requests received during the comment period or at the discretion of the Illinois EPA, a public hearing may be held to clarify one or more issues concerning the permit application. A request for a public hearing must be submitted in writing, must indicate opposition to the draft permit and must state the nature of the issues proposed to be raised at the hearing. Public notice of the public hearing will be issued at least forty-five (45) days before the hearing date.

For further information regarding the permit process, to submit written comments on the draft permit, or to request a public hearing, please contact:

Sarah Brubaker, Office of Community Relations #5
Illinois Environmental Protection Agency
1021 North Grand Avenue East
Post Office Box 19276
Springfield, Illinois 62794-9276
(217) 786-0790

When the Illinois EPA makes its final permit decision, notice will be given to the applicant and each person who has submitted written comments or requested notice of the final permit decision. The permit will become effective thirty-five (35) days after service of notice of the decision or at a later date if stated in the permit unless the decision is appealed.

NAME: MICHAEL CAMERON PLOTTED ON: 11/26/2023 10:54 AM FILE PATH: D:\AutoCAD backup 1-27-22\Lenoffia\91-143 PDC #1\LANDFILL STATUS FIGURES\91143599.dwg



NOTES:

1. UNITS DENOTED IN GREEN HAVE BEEN CLOSED AS OF DECEMBER 1, 2023.
2. UNITS DENOTED IN RED HAVE NOT BEEN CLOSED AS OF DECEMBER 1 2023.
3. COMPOSITE PHOTOGRAPH PRODUCED BY CLOUDPOINT GEOGRAPHICS FROM IMAGES ACQUIRED 4-18-2017.

CFL Environmental, Inc.



FIGURE 1

PDC NO. 1 FACILITY
RCRA WASTE MANAGEMENT UNITS
GFL ENVIRONMENTAL, INC.
PEORIA, ILLINOIS
PROJECT NO. 91-0143



ILLINOIS ENVIRONMENTAL PROTECTION AGENCY

1021 NORTH GRAND AVENUE EAST, P.O. BOX 19276, SPRINGFIELD, ILLINOIS 62794-9276 · (217) 782-3397

JB PRITZKER, GOVERNOR

JAMES JENNINGS, INTERIM DIRECTOR

RCRA HAZARDOUS WASTE PERMIT

1438120003 – Peoria County
Peoria Disposal Company
ILD000805812
Permit Log No. B-24R2
RCRA Administrative Record – 24D
Permit Draft

Issue Date: DRAFT
Effective Date: DRAFT
Expiration Date: DRAFT

PERMITTEE

Peoria Disposal Company
Attn: Mr. Matthew Coulter
4700 N. Sterling Ave.
Peoria, Illinois 61615

FACILITY LOCATION

4349 Southport Road
Peoria, Illinois 61615

A renewed Resource Conservation Recovery Act (RCRA) hazardous waste permit is hereby issued to Peoria Disposal Company, as Owner, Operator and Permittee pursuant to Section 39(d) of the Illinois Environmental Protection Act and Title 35 Illinois Administrative Code (35 Ill. Adm. Code) Subtitle G.

PERMITTED HAZARDOUS WASTE ACTIVITY

This permit requires Peoria Disposal Company to conduct the following hazardous waste activities in accordance with the approved permit application and the conditions in this permit:

1. **Storage** in Containers (S01), Tanks (S02), Surface Impoundment (S04), and Containment Building (S06)
2. **Treatment** (Non-Hazardous) in Tanks (T01), and Containment Building (T94)
3. **Post-Closure Care** of the closed Barrel Trench, Section A, Section B, and Trenches C-1 through C4.
4. **Groundwater Monitoring** Detection Monitoring Program
5. **Corrective Action** for the Pre-RCRA Closed Landfill.

This permit consists of the conditions contained herein and those in the sections and attachments in this permit. The Permittee must comply with all terms and conditions of this permit and the applicable regulations contained in 35 Ill. Adm. Code Parts 702, 703, 705, and 720 through 729 in effect on the effective date of this permit.

This permit is issued based on the information submitted in the approved permit application identified in Attachment J of this permit and any subsequent amendments. Any inaccuracies found in the information provided in the permit application may be grounds for the termination or modification of this permit (see 35 Ill. Adm. Code 702.187 and 702.186) and potential enforcement action (415 ILCS 5/44(h)).

DRAFT

Jacqueline M. Cooperider, P.E.
Permit Section Manager
Bureau of Land

JMC: KDH :1438120003-RCRA-B24R2-draft.docx

2125 S. First Street, Champaign, IL 61820 (217) 278-5800
115 S. LaSalle Street, Suite 2203, Chicago, IL 60603
1101 Eastport Plaza Dr., Suite 100, Collinsville, IL 62234 (618) 346-5120
9511 Harrison Street, Des Plaines, IL 60016 (847) 294-4000

595 S. State Street, Elgin, IL 60123 (847) 608-3131
2309 W. Main Street, Suite 116, Marion, IL 62959 (618) 993-7200
412 SW Washington Street, Suite D, Peoria, IL 61602 (309) 671-3022
4302 N. Main Street, Rockford, IL 61103 (815) 987-7760

**RCRA PERMIT ISSUED TO
Peoria Disposal Company
1438120003 – PEORIA COUNTY
ILD000805812
Log No. B-24R2**

TABLE OF CONTENTS

<u>ITEM</u>		<u>PAGE</u>
Section I	General Facility Description	I-1 to I-3
Section II	Containers	II-1 to II-7
Section III	Tank Systems	III-1 to III-11
Section IV	Containment Building	IV-1 to IV-8
Section V	Surface Impoundment	V-1 to V-5
Section VI	Post-Closure	VI-1 to VI-8
Section VII	Groundwater Detection Monitoring Program	VII-1 to VII-14
Section VII-A	Shallow Zone Groundwater Observation Monitoring Program	VII-A-1 to VII-A-11
Section VIII	Standard Conditions	VIII-1 to VIII-13
Section IX	Reporting and Notification Requirements	IX-1 to IX-6
Section X	Special Conditions	X-1
Section XI	Corrective Action for Solid Waste Management Units	XI-1 to XI-5

TABLE OF CONTENTS (CONT.)

LIST OF ATTACHMENTS	Page(s)
Attachment A – General Inspection Schedule	A-1 to A-4
Attachment B – Post-Closure Inspection Schedule	B-1 to B-2
Attachment C – Waste Lists and Hazardous Waste Identification Numbers	C-1 to C-23
Attachment D – Averaged Replicate T-Test	D-1 to D-2
Attachment E – Closure and Post-Closure Cost Estimates	E-1
Attachment F – Certification Documentation for Construction	F-1 to F-2
Attachment G – Overview of RCRA Corrective Action Activities	G-1 to G-2
Attachment H – Closure Certification Statement	H-1
Attachment I – Facility Diagram	I-1
Attachment J – Approved Permit Application	J-1

SECTION I – GENERAL FACILITY DESCRIPTION

A. OWNER AND OPERATOR

1. The facility is owned and operated by Peoria Disposal Company (PDC) (a subsidiary of GFL Environmental, Inc.), herein referred to as the "Permittee." (35 Ill. Adm. Code 702.121, 702.123, and 703.181)

Peoria Disposal Company
4700 North Sterling Avenue
Peoria, Illinois 61615

B. LOCATION

1. Location of Facility

The facility is located approximately one (1) mile south of the intersection of West Reservoir Boulevard and Southport Road near Pottstown, Illinois. PDC owns approximately 120 acres at this location of which sixty-four (64) acres were permitted for hazardous waste disposal. The facility is located at:

Peoria Disposal Company
4349 Southport Road
Peoria, Illinois 61615

The facility contact is the Regional Environmental Compliance Manager and can be reached at 309/273-3563.

2. Facility Map

The location of the regulated units within the facility is shown on Attachment I.

C. DESCRIPTION OF HAZARDOUS AND NON-HAZARDOUS WASTE MANAGEMENT ACTIVITIES

The Permittee is a multi-faceted waste management company, including hauling, non-hazardous waste treatment, hazardous and non-hazardous waste storage, post-closure care, emergency response and remedial action. The entire PDC facility covers approximately 120 acres.

1. Containers

Operating Permitted Unit

- Up to ten (10) roll-off containers may be stored in the container storage/staging

area located north of the surface impoundment known as Runoff Retention Basin 1 (RRB1).

2. Wastewater Treatment System

A wastewater treatment system for hazardous liquids is located at the facility. The operation of the wastewater treatment itself is regulated by the Illinois EPA's Bureau of Water.

Operating Permitted Unit

- One (1) tank has been constructed for storage of incoming hazardous liquids and leachate from the closed landfill. This tank may contain a maximum of 20,000 gallons and has secondary containment to collect any leaks or spills from the tank system.

Proposed to be Constructed Permitted Units

- Up to three (3) additional leachate storage tanks are permitted for future construction. These tanks, if built, will be identical in construction and operation to the existing tank.

3. Solids Storage Building

Proposed to be Constructed Permitted Units

- A solids storage building is proposed to be constructed consisting of a container storage area, nine (9) hazardous waste storage tanks and other appurtenances/ancillary equipment (backhoe, etc.) necessary to operate the facility safely and in an environmental manner. The solids storage building will have a secondary containment system to collect spills and leaks and a leak detection system between the concrete foundation and the HDPE liner.

4. Waste Stabilization Facility (WSF)

Operating Permitted Unit

- A WSF is present to solidify non-hazardous wastes. The WSF has a secondary containment system to collect leaks or spills, and a leak detection system between the concrete foundation and a high-density polyethylene (HDPE) liner.

Proposed to be Constructed Permitted Units

- Two (2) proposed storage silos will be used to store dry, powdery wastes for eventual treatment in the WSF. These units will have a concrete vault as a secondary containment system.

5. Surface Impoundment

Operating Permitted Unit

- A double-lined hazardous waste surface impoundment known as RRB1 is present at the facility. This impoundment was once used to store run-off from the active area of the hazardous waste landfill. It has been and continues to be used for the storage of liquid hazardous wastes, including leachate from the hazardous waste landfill and non-contact storm water.

6. Landfill

Post-Closure Permitted Unit

- Of the approximately 120-acre RCRA facility, approximately sixty-four (64) acres are occupied by the closed seven (7) hazardous waste landfill areas. PDC had conducted the closure of the hazardous waste landfill areas in phases over time and submitted certification of closure of the final portion of these areas on January 3, 2014. The Illinois EPA has accepted the certification of closure of the entire landfill unit (including the seven (7) landfill areas) and the post-closure care for this hazardous waste landfill began on January 7, 2014.

7. Groundwater

- The groundwater detection monitoring program includes twenty-three (23) existing wells to monitor the groundwater in the uppermost (Lower Sand) aquifer: eighteen (18) downgradient wells and five (5) upgradient wells. In addition, the shallow zone groundwater observation monitoring program (Upper Till) includes six (6) wells which are intended to detect any releases from the landfill to the Upper Till. Wells will be sampled semi-annually during the operation, closure, and post-closure. Groundwater samples are analyzed for parameters based on waste characteristics and groundwater characteristics.

SECTION II: CONTAINERS

A. SUMMARY

This Section presents permit conditions for the storage of hazardous waste in bulk transport trailers according to the regulatory requirements of 35 Ill. Adm. Code 724, Subpart I (Containers) and Subpart G (Closure).

The Permittee may store up to ten (10) roll-off containers in the container storage/staging area located north of the Runoff Retention Basin 1 (the surface impoundment identified in Section V).

B. WASTE IDENTIFICATION

1. The storage of all hazardous waste containers shall be located in the approved storage area identified below:

Location	Maximum Containment Volume	Maximum Number and Type of Containers
Container staging/storage area	138.7 cubic yards	10 roll-off containers

2. The Permittee may only store the hazardous waste identified in Attachment C. Non-hazardous wastes may also be stored in the RCRA storage area provided the wastes are handled in an identical fashion to incoming hazardous wastes approved by the Illinois EPA in accordance with conditions of this permit.
3. The Permittee is prohibited from storing waste not identified in Condition II.B.2 in the permitted unit.

C. DESCRIPTION/CONDITION OF CONTAINERS

1. If a container holding waste is not in good condition (e.g., severe rusting, apparent structural defects) or if it begins to leak, the Permittee must transfer the waste from that container to a container that is in good condition or manage the waste in accordance with the approved permit application. This type of action must be recorded in the facility's operating record.
2. Each container containing hazardous waste shall be clearly marked with the words "Hazardous Waste" and the date upon which each period of accumulation begins.
3. Prior to being placed in the storage area, the contents of each container shall be clearly marked on a label attached to the side of the container in accordance with Title 40

Code of Federal Regulations (40 CFR) Part 172. If a container's label falls off, becomes illegible, is damaged or is removed while it is in the storage area, it must be replaced immediately. The container's label shall include the generic name of the waste in the container and its alpha numeric identification.

D. COMPATIBILITY OF WASTE WITH CONTAINERS

The Permittee must use a container made of or lined with material, which will not react with, and are otherwise compatible with the 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 waste must always be closed during storage, except when it is necessary to add or remove waste.
2. A container holding 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 weekly, in accordance with Attachment A to detect leaks and deterioration of containers and the containment system caused by corrosion or other factors. Results of all inspections and activities undertaken to correct deficiencies shall be documented in the facility's operating record.

1. Appropriate action to clean-up any release of waste from a leaking or deteriorated container shall be carried out immediately upon discovery.
2. If a portion of the containment system is found to be in a deteriorated condition, the Permittee shall immediately remove all waste containers from the deteriorated area. No waste may be placed in the deteriorated area until the containment system has been repaired.

G. CONTAINMENT

1. The Permittee shall operate and maintain the containment system according to the design plans and operating specifications contained in the approved permit application.
2. The Permittee shall perform a complete inspection of the surface coating yearly and perform annual maintenance to ensure the integrity of the coating.

H. CLOSURE REQUIREMENTS

At closure, all waste and waste residues must be removed from the container storage area. Remaining containers, liners, bases, and soil containing or contaminated with waste or 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 in writing of its intent to close the container storage area at least forty-five (45) 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. Closure shall not begin without approval from the Illinois EPA. The Illinois EPA review of this plan will be subject to the permit appeal provisions contained in Section 39(a) and 40(a) of the Environmental Protection Act (Act). The response from the Illinois EPA shall establish:
 - a. The sampling plan;
 - b. What contaminants/parameters must be analyzed for; and
 - c. The levels at which decontamination is considered complete.
2. The concrete surfaces shall be visually inspected, photographed and all residue adhering to the surface must be removed by scraping and/or brushing. Following this, the concrete surfaces shall be steam cleaned and triple rinsed. All sweepings, wash and rinse water shall be collected and managed as a hazardous waste, unless the Permittee can document that the waste is not hazardous as defined in 35 Ill. Adm. Code 721.103. A qualified Illinois licensed professional engineer must certify that the surface has no cracks, gaps or other defects which would allow waste to migrate through to the underlying soil or an approved sampling plan must be used to establish clean closure.
3. The Permittee shall provide post-closure care in accordance with 35 Ill. Adm. Code 724, Subpart G for the container storage area in the event that all the hazardous wastes or contaminated soils cannot be practicably removed or decontaminated in accordance with the approved closure plan identified in Condition II.H.1. If it is determined that the closure requirements cannot be met and post-closure care for the container storage area is required, this permit will be modified to require post-closure care for the container storage area, in accordance with 35 Ill. Adm. Code 724, Subparts G and H.
4. Should post-closure care, as described in Condition II.H.3, 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. The application must be submitted 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 Condition II.H.3 and Condition II.H.4, shall be provided within thirty (30) days following modification of the permit. The approved closure cost estimate for this unit is identified in Attachment E.
6. Within sixty (60) days after closure of the container storage area has been completed, 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 H or a certification with identical wording must be used. Signatures must meet the requirements of 35 Ill. Adm. Code 702.126. The qualified Illinois licensed professional 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 qualified Illinois licensed professional engineer must be sufficient to determine the adequacy of each critical activity. Financial assurance must be maintained for the container storage area until the Illinois EPA approves the closure certification for the unit and allows for release of financial assurance in writing. Illinois EPA's review of closure certifications for partial or final closure will be conducted in accordance with 35 Ill. Adm. Code 724.278.

A Closure Documentation Report must be submitted with the closure certification. This report must include the following information:

- 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 summary of all releases of waste at the container storage area including the date of the release, approximate amount of waste released, and the type of waste released;
- f. A chronological summary of closure activities and the cost involved;
- g. Tests performed, methods and results; and

- h. Color photographs of closure activities which document conditions before, during and after closure.
7. The Permittee shall obtain any necessary permits for waste disposal prior to initiating excavation activities. The Permittee shall not create regulated waste pile units by storing the excavated hazardous waste in piles. The ninety (90) day accumulation time exemption (35 Ill. Adm. Code 722.117) only applies to containers and tanks.
8. Hazardous waste operations and emergency response activities conducted under this permit must be in accordance with the requirements of 29 CFR Part 1910.
9. If the Illinois EPA determines that implementation of this closure plan fails to satisfy the requirements of 35 Ill. Adm. Code 724.211, the Illinois EPA reserves the right to amend the closure plan. Revisions of closure plans are subject to the appeal provisions of Sections 39(a) and 40(a) of the Act.
10. The Permittee shall analyze all samples individually (i.e., no compositing). Sampling and analytical procedures shall be conducted in accordance with the latest edition of SW-846, Testing Methods for Evaluating Solid Wastes and the Illinois EPA's Guidance for Preparing RCRA Closure Plans. Sample size per interval shall be minimized to prevent dilution of any contamination. Apparent visually contaminated material within a sampling interval shall be included in the sample portion of the interval to be analyzed.

I. SPECIAL REQUIREMENTS FOR INCOMPATIBLE WASTE

1. 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.
2. The Permittee shall not place hazardous waste in an unwashed container that previously held an incompatible waste or material.
 3. The Permittee shall not store containers holding a hazardous waste that is incompatible with any 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, wall, or other devices.

J. GENERAL OPERATING REQUIREMENTS

The Permittee shall operate the container storage area in accordance with the approved permit application subject to the following conditions:

1. The Permittee may receive hazardous waste for storage in containers provided the following requirements are met.
 - a. The material must be a waste which has been identified in Attachment C;
 - b. The waste must be analyzed in accordance with the approved waste analysis plan; and
 - c. The waste must be accompanied by a properly completed Illinois manifest unless the generator is: (1) a very small quantity generator as defined in 35 Ill. Adm. Code 720.110; or (2) subject to the exemption as defined in 35 Ill. Adm. Code 722.114.
2. Cleanup of all spills inside the secondary containment areas must begin immediately upon discovery and be completed within twenty-four (24) hours. Secondary containment must be inspected immediately after cleanup for cracks, gaps or other defects (failure of the coating) which would allow waste to migrate to the underlying soil. If any deterioration is discovered, the Permittee shall immediately remove all waste from the deteriorated area.
3. The Permittee shall remove any precipitation which accumulates in the secondary containment system within twenty-four (24) hours of the time such accumulation is discovered.

4. For any waste(s) subject to the land disposal restrictions contained in 35 Ill. Adm. Code Part 728, the Permittee shall comply with all applicable waste analysis, notification and record keeping requirements contained in 35 Ill. Adm. Code Part 728.

SECTION III: TANK SYSTEMS

A. SUMMARY

This section contains permit conditions for the fifteen (15) hazardous waste storage tanks and one (1) non-hazardous waste treatment tank according to the regulatory requirements of 35 Ill. Adm. Code 724, Subpart J (Tank Systems) and Subpart G (Closure).

1. The Permittee may store liquid hazardous waste in up to four (4) tanks (T-1 to T-4). However, currently only one (1) leachate storage tank (T-4) has been constructed and is in operation. T-4 is located near the east edge of the site as shown on Attachment I. Construction requirements in Condition III.J must be met for the three (3) additional tanks proposed to be located near the hazardous liquid treatment unit. The capacity of each tank is 20,000 gallons.
2. Nine (9) tanks (SS-1 to SS-9) are permitted for either storage of hazardous wastes or treated wastes waiting for disposal; however, none have yet to be constructed. The total capacity of these tanks is 464,508 gallons. Construction requirements in Condition III.J must be met.
3. Two (2) silos (S-1 and S-2) are permitted for storage of dry, fine hazardous waste prior to stabilization; however, neither have yet to be constructed. The capacity of each tank is 32,613 gallons. Construction requirements in Condition III.J must be met.
4. One (1) tank, referred to as the Stabilized Base Mixer, is present at the facility which is used to stabilize non-hazardous waste. This unit is in the WSF described in Section IV of this permit. The Permittee is not allowed to treat hazardous waste in this unit.
5. All tanks must have secondary containment.

B. WASTE IDENTIFICATION

1. The Permittee may treat a total volume of 8,060 gallons/hour of non-hazardous waste in a Stabilized Base Mixer tank subject to the terms of this permit. The Permittee is not allowed to treat hazardous waste.
2. The Permittee may only store hazardous waste identified in Attachment C to this permit. The Permittee may accept non-hazardous waste if the wastes are managed in accordance with the conditions of this permit that apply to hazardous waste placed in the same unit.
3. The Permittee may store hazardous wastes and treat non-hazardous wastes in the tanks listed below subject to the terms of this permit:

Tank No.	Capacity (Gallons)	Material of Construction	Dimensions	Status	Minimum Shell Thickness in Inches (")
T-1	20,000	fiberglass	11'6"x25'0" w 45° cone bottom	proposed	0.1875
T-2	20,000	fiberglass	11'6"x25'0" w 45° cone bottom	proposed	0.1875
T-3	20,000	fiberglass	11'6"x25'0" w 45° cone bottom	proposed	0.1875
T-4	20,000	fiberglass	11'6"x25'0" w 45° cone bottom	existing	0.1875
Stabilized Base Mixer*	194 ft ³	steel	12'x 6'4" x4'6"	existing	3/8" sacrificial wear liner
SS-1	47,124	concrete	20'x14'x22.5'	proposed	1/4" sacrificial wear liner
SS-2	47,124	concrete	20'x14'x22.5'	proposed	1/4" sacrificial wear liner
SS-3	47,124	concrete	20'x14'x22.5'	proposed	1/4" sacrificial wear liner
SS-4	67,320	concrete	20'x14'x22.5'	proposed	1/4" sacrificial wear liner
SS-5	67,320	concrete	20'x14'x22.5'	proposed	1/4" sacrificial wear liner
SS-6	47,124	concrete	20'x14'x22.5'	proposed	1/4" sacrificial wear liner
SS-7	47,124	concrete	20'x14'x22.5'	proposed	1/4" sacrificial wear liner
SS-8	47,124	concrete	20'x14'x22.5'	proposed	1/4" sacrificial wear liner
SS-9	47,124	concrete	20'x14'x22.5'	proposed	1/4" sacrificial wear liner
S-1	32,613	steel	36'x12'dia w/cone 9' 4 9/16" L	proposed	0.1875
S-2	32,613	steel	36'x12'dia w/cone 9' 4 9/16" L	proposed	0.1875

* - Treatment Tank

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. For ancillary equipment, a leak test or other integrity assessment as approved by the Illinois EPA must be conducted annually.
4. In the event of a leak or a spill from the tank system, from a secondary containment system, or if a system becomes unfit (i.e., failure of the coating) for continued use, the Permittee shall remove the system from service immediately and complete the following actions: (35 Ill. Adm. Code 724.296(a) through (f))
 - a. Stop the flow of hazardous/non-hazardous waste into the system and inspect the system to determine the cause of the release.
 - b. Remove all waste as necessary from the system within twenty-four (24) hours of the detection of the leak to prevent further release and to allow inspection and repair of the system. If the Permittee finds that it will be impossible to meet this time period, the Permittee shall notify the Illinois EPA verbally within 24-hours and demonstrate that a longer time period is required. In addition, a written submission describing the incident must be submitted to Illinois EPA within five (5) days of the release.

If the collected material is a hazardous waste, it must be managed in accordance with all applicable requirements of 35 Ill. Adm. Code Parts 722 through 724.

- c. Contain visible releases to the environment. The Permittee shall immediately conduct a visual inspection of all releases to the environment and based on that inspection: (1) prevent further migration of the leak or spill to soils or surface water; and (2) remove and properly dispose of any visible contamination of the soil or surface water.
- d. Close the system in accordance with the closure plan, contained in the approved permit application, unless the following actions are taken:
 - i. For a release caused by a spill that has not damaged the integrity of the system, the Permittee shall remove the released waste and make any necessary repairs to fully restore the integrity of the system before returning the tank system to service.

- ii. For a release caused by a leak from the primary tank system to the secondary containment system, the Permittee shall repair the primary system prior to returning it to service.
5. The Permittee shall remove all liquids, either from spills or precipitation, contained in the secondary containment system within twenty-four (24) hours.

D. GENERAL OPERATING REQUIREMENTS

1. The Permittee shall not place waste or treatment reagents in a tank system if they could cause the tank, its ancillary equipment, or the containment system to rupture, leak, corrode, 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.
 - a. Tanks T-1 through T-4 shall be operated with automatic waste feed shut-off valves connected to a continuously monitored liquid level sensors which are activated when the tank is one (1) foot (~95%) below the top of the full tank.
 - b. The solid storage tanks shall be operated with two (2) feet of freeboard. All unloading of trucks shall be under direct observation if the level of waste in the tank is within two (2) feet of the freeboard mark.
3. The Permittee, in the event of a leak or a spill in the tank system, shall comply with the practices and procedures described in the approved permit application and 35 Ill. Adm. Code 724.296, and notify the Illinois EPA in accordance with Section III.G.
4. All hazardous and non-hazardous special wastes received at the facility must be accompanied by a properly completed Illinois manifest in accordance with 35 Ill. Adm. Code Part 809.
5. A trained and qualified employee of the facility shall be present at all times when waste is being transferred from a tank truck to a receiving tank.

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 a qualified Illinois licensed professional engineer.

F. INSPECTIONS

1. The Permittee must inspect the tank systems in accordance with Attachment A.
2. The bulk liquid unloading area shall be inspected in the following manner:

The area shall be inspected for the presence of spills and releases after each truck has been unloaded. If observed, such releases shall be cleaned up immediately. Documentation of these inspections and any corrective actions taken shall be included in the operating record for the facility.

3. 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. A hydrostatic leak test or other integrity assessment as approved by the Illinois EPA shall be conducted annually on the tank ancillary equipment.
 - b. For steel tanks:
 - i. An ultrasonic thickness test shall be conducted annually on the tank.
 - ii. A detailed visual inspection of the tank's interior shall be conducted every fifth (5th) 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 Illinois licensed 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 first inspection of any proposed tanks shall be within five (5) years of becoming operational.
 - c. For all fiberglass tanks:
 1. A detailed visual inspection of the tank's interior shall be conducted every fifth (5th) year to ensure the tank's integrity. During this internal inspection, the interior surface shall be inspected for softening, indentations, cracks, exposed fibers, aging, checking, lack of surface resin, delamination, translucency/discoloration, air bubbles and thin areas. Corrective action as specified by the manufacturer of these tanks shall be taken if the internal inspection indicates that the interior surface of a tank system has been detrimentally affected by the hazardous wastes which have been stored in it.

- d. For all concrete tanks:
 - i. A detailed visual inspection of the tank's interior shall be conducted annually to ensure the tank's integrity.
- e. The inspection of each tank shall be certified by a qualified Illinois licensed professional engineer, or corrosion technician, or other qualified inspector if allowed by the Professional Engineering Act of 1989 in accordance with the manufacturer's instructions, recommendations, and specifications.
- f. All waste and wash water generated during evacuation of the tanks shall be managed as a hazardous waste, unless the permittee can document that the waste is not hazardous as defined in 35 Ill. Adm. Code 721.103.
- g. Results of the inspection shall be submitted to the Illinois EPA within sixty (60) days of the inspection date and shall also be included in the facility's operating record.
- h. If the results of these inspections indicate a tank system is leaking or is experiencing excessive corrosion or deterioration the procedures set forth in 35 Ill. Adm. Code 724.296 shall be followed.

G. REPORTING AND RECORDKEEPING

- 1. The Permittee shall report to the Illinois EPA's, Bureau of Land (BOL) Peoria Field Operation Office within twenty-four (24) hours when a leak or spill occurs in the tank system or secondary containment system unless the spill or leak of hazardous waste is less than or equal to one (1) pound in quantity and it is immediately contained and cleaned up.
- 2. Within thirty (30) days of detecting a release to the environment from the tank system or secondary containment system, the Permittee shall report the following information in writing to the Illinois EPA's Springfield Headquarters and Illinois EPA's BOL Peoria Field Operation Office:
 - 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; and

- e. Description of response actions taken or planned.
3. The Permittee shall submit to the Illinois EPA all certifications of major repairs to correct leaks within seven (7) days from returning the tank system to service. (35 Ill. Adm. Code 724.296(f))

H. CLOSURE REQUIREMENTS

Closure of the tank systems 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 in writing of its intent to close the tank system at least forty-five (45) 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 a tank system has been properly decontaminated and clean closed. The plan shall be approved by the Illinois EPA in writing prior to being implemented. The Illinois EPA's review of this plan will be subject to the permit appeal provisions contained in Section 39(a) and 40(a) of the Act. The response from the Illinois EPA shall establish:
 - a. The sampling plan;
 - b. What contaminants/parameters must be analyzed for; and
 - c. The levels at which decontamination is considered complete.
2. The surfaces shall be visually inspected, photographed and any residue adhering to the surface must be removed by scraping and/or brushing. Following this, the surfaces must be steam cleaned and triple rinsed. All wash and rinse water shall be collected. For tank systems which include secondary containment systems which met the requirements of 35 Ill. Adm. Code 724.293 at the time of installation, the secondary containment must be certified by a qualified Illinois licensed professional engineer indicating that the surface has no cracks, gaps or other defects which would allow waste to migrate through to the underlying soil. If such a certification cannot be made, soil sampling and analysis must be conducted to establish clean closure.

Sweepings collected during closure of any tank system shall be managed as a hazardous waste. All wash water and rinse water 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.
3. The Permittee shall provide post-closure care in accordance with 35 Ill. Adm. Code Part 724 for a tank system if all 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 a landfill and the post-closure care plan in the approved application will be modified as required to provide adequate post-closure care for the affected tank system in accordance with 35 Ill. Adm. Code 724, Subparts G and H.

4. Should post-closure care, as described in Condition III.H.3, become necessary, the Permittee shall submit an application for modification to this permit, including an amended closure plan and 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 care of any tank system being closed as a landfill, when required in accordance with Conditions III.H.3 and III.H.4, shall be updated within thirty (30) days following modification of the permit under the provisions of Condition III.H.4. The approved closure cost estimate for the existing tanks at the facility is identified in Attachment E.
6. Within sixty (60) days after closure of the 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 H to this permit or a certification with identical wording must be used. Signatures must meet the requirements of 35 Ill. Adm. Code 702.126. The qualified Illinois licensed professional engineer or an engineer working under his direct supervision must be present during all major activities during the closure, (e.g., decontamination, soil sampling, soil removal, backfilling and final cover placement). The frequency of inspections by the qualified Illinois licensed professional engineer must be sufficient to determine the adequacy of each major activity. Financial assurance must be maintained for the tank system until the Illinois EPA approves the closure certification for the unit and allows for release of financial assurance in writing. Illinois EPA's review of closure certifications for partial or final closure will be conducted in accordance with 35 Ill. Adm. Code 724.297.

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; and
 - h. A scale drawing of all excavated or decontaminated areas and sample locations.
7. The Permittee shall obtain any necessary permits for waste disposal prior to initiating excavation activities. The Permittee shall not create regulated waste pile units by storing the excavated hazardous waste in piles. The permit exemption (35 Ill. Adm. Code 722.117) only applies to containers and tanks.
 8. Hazardous waste operations and emergency response activities conducted under this permit must be in accordance with the requirements of 29 CFR Part 1910.
 9. If the Illinois EPA determines that implementation of this closure plan fails to satisfy the requirements of 35 Ill. Adm. Code 724.211, the Illinois EPA reserves the right to amend the closure plan. Revisions of closure plans are subject to the appeal provisions of Sections 39(a) and 40(a) of the Act.
 10. The Permittee shall analyze all samples individually (i.e., no compositing). Sampling and analytical procedures shall be conducted in accordance with the latest edition of SW-846, Testing Methods for Evaluating Solid Wastes and the Illinois EPA's Guidance for Preparing RCRA Closure Plans. Sample size per interval shall be minimized to prevent dilution of any contamination. Apparent visually contaminated material within a sampling interval shall be included in the sample portion of the interval to be analyzed.

I. 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.

Precautions must be 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.
2. The Permittee shall not place waste in a tank system that has not been decontaminated and that previously held an incompatible waste or material.

J. GENERAL CONSTRUCTION REQUIREMENTS

The Permittee is permitted to construct/install the tanks (including ancillary equipment, secondary containment, and other necessary appurtenances) identified in Section III.B. These tanks may only be constructed in accordance with the approved permit application, subject to the following modifications:

1. Within thirty (30) days after completing construction and prior to any waste being placed or stored in a tank or its corresponding ancillary equipment, the Permittee shall submit to the Illinois EPA a certification from a qualified Illinois licensed professional engineer. This certification must demonstrate that the tank system meets the requirements of 35 Ill. Adm. Code 724.292. The certification shall contain the information described in Attachment F and the additional information listed below:
 - a. A report documenting the new tank system was inspected for the presence of the following items:
 - i. weld breaks;
 - ii. punctures;
 - iii. scrapes of protective coatings;
 - iv. cracks;
 - v. corrosion;
 - vi. other structural damage or inadequate construction/installation.

All defects noted during this inspection must be remedied prior to covering, enclosing or placing the tank system in use.

- b. A copy of the leak test performed on all of the new tanks and ancillary equipment, including a description of any repairs performed on the system to remedy the leak(s).

- c. Certification that the tanks and ancillary equipment were designed and installed in a manner that is supported and protected against physical damage and excessive stress due to settlement, vibration, expansion, or contraction.
2. The Illinois EPA shall review the certification described in Condition III.J.1 to ensure the tank systems and their secondary containment meets the requirements of 35 Ill. Adm. Code 724.292 and 724.293. The Illinois EPA will respond with any comments to this certification in writing within fifteen (15) days from the receipt of the certification. The Illinois EPA review of this certification will be subject to the permit appeal provisions contained in Section 39(a) and 40(a) of the Illinois Environmental Protection Act.

SECTION IV: CONTAINMENT BUILDING

A. SUMMARY

The Permittee may utilize a containment building, designated as the Waste Stabilization Facility (WSF) for: (1) storage of hazardous waste; and (2) storage and treatment of non-hazardous wastes that contain free liquids or require treatment. The Permittee is not allowed to treat hazardous waste. Four (4) storage bays for incoming waste contain a combined maximum of eighty-eight (88) cubic yards. After treatment in a mixer, the waste is moved to the curing area, which can contain a maximum of 658 cubic yards of treated waste. The WSF is constructed with a liner system, leachate collection sumps, and a leak detection system. To continue treatment of hazardous waste, PDC is required to submit a new Waste Analysis and Treatment Plan to the Illinois EPA for approval and submit a certification by a qualified Illinois licensed professional engineer that the containment building continues to meet the requirements of 35 Ill. Adm. Code 724.1101.

B. WASTE IDENTIFICATION

1. The Permittee may store at the WSF:
 - a. the hazardous waste identified in Attachment C; and
 - b. non-hazardous waste if the wastes are managed in accordance with the conditions of this permit that apply to hazardous waste placed in the same unit.
2. The Permittee may store and treat the following wastes (non-hazardous only) within the various units in the WSF, subject to the terms of this permit:

Description of Units	Capacity (cubic yards)	Description of Hazardous Wastes
Receiving Bays		See Attachment C for waste list and hazardous waste numbers.
B-1	22	
B-2	22	
B-3	22	
B-4	22	
Curing Area	658	
Mix Cell A	168	
Mix Cell B	56	

3. The Permittee is prohibited from storing or treating waste in the permitted unit not identified in Condition IV.B.2.

C. DESIGN AND OPERATING REQUIREMENTS

1. The Permittee shall operate the WSF in accordance with the approved permit application.
2. The Permittee shall design, construct, maintain, and operate the leachate collection and removal system, and a leak detection system in accordance with the design plans and operating practices contained in the approved permit application.
3. The Permittee shall design, construct, operate, and maintain the run-on control system in accordance with the design plans, specifications, and operating practices contained in the approved permit application.
4. The Permittee shall design, construct, operate, and maintain the run-off management system in accordance with the design plans, specifications, and operating practices contained in the approved permit application.
5. The Permittee shall empty or otherwise manage run-on and run-off collection and holding facilities to maintain the design capacity of the system(s) in accordance with the design plans and operating practices specified in the approved permit application.
6. The Permittee must maintain the primary barrier free of significant cracks, gaps, corrosion, and other deterioration in accordance with 35 Ill. Adm. Code 724.1101(c)(1)(A).
7. The Permittee shall maintain the level of the stored/treated material within the walls of the WSF so that the height of the waste does not exceed the requirements of 35 Ill. Adm. Code 724.1101(c)(1)(B).
8. The Permittee shall prevent track-out from the WSF in accordance with 35 Ill. Adm. Code 724.1101(c)(1)(C).
9. The Permittee shall operate and maintain the negative pressure system in accordance with 35 Ill. Adm. Code 724.1101(c)(1)(D) to ensure compliance with the no visible fugitive dust emissions requirement.
10. The Permittee shall require all workers to wear respirators anytime they are within the structure (i.e., at or near the receiving bays, the treatment area or the inside curing area) and the facility is processing (receiving/treating) waste, except that workers inside the sealed cab and office are not required to wear a respirator.

11. The Permittee may perform treatment of dusty non-hazardous waste through the addition of moisture in accordance with the procedures outlined below:
 - a. Shipments of waste to be moisturized shall be routed to the WSF in accordance with the procedures for all shipments that require treatment.
 - b. The mixing unit to receive the waste must be emptied of any previously managed wastes as per standard procedures to maintain the waste's status as not subject to the land disposal restriction standards in 35 Ill. Adm. Code Part 728. The existing "Mixer Cleaning Documentation" form included in the approved permit application may serve to document this step.
 - c. Only potable "city" water may be used for moisturization to maintain the waste's status as not subject to the land disposal restriction standards at 35 Ill. Adm. Code Part 728. This is to ensure that no wash waters or water from any other source that may have contacted hazardous waste in the WSF is used.
 - d. The waste and water must be thoroughly blended to ensure uniformity of the treated waste's consistency.
 - e. The Stabilization Clerk must assign a batch number and complete a "Waste Treatment Record" form included in the approved permit application.
 - f. The treated waste shall be loaded into a roll off box(es) and transported to Gate Control prior to land disposal. Gate Control personnel must verify that an authorization form, completed by the Stabilization Clerk, has been issued for that batch, visually inspect the treated waste to verify it has been adequately moisturized and, conversely, inspect for free-standing liquid and perform a paint filter test to ensure the waste was not over-treated and does not meet the definition of a liquid waste.
 - g. The treated waste must receive Gate Control clearance before being transported to the landfill.
 - h. For purposes of Condition IV.C.11, dusty waste shall be defined as those wastes that are able of generating particulate matter as defined in 35 Ill. Adm. Code 211.4510 during loading, unloading, or mixing such that the particulate matter may be generated in sufficient volume to cause air pollution as defined in Section 3.115 of the Act.

D. INSPECTIONS

1. The Permittee shall inspect the WSF (including the liner and any appurtenance for control of run-on and run-off) on a weekly basis and in accordance with Attachment A.

2. The Permittee shall inspect the WSF immediately after storms (3 inches or more of rain in a 24-hour period).
3. The Permittee shall inspect the WSF leak detection system at least once weekly.
4. The Permittee shall conduct each inspection to detect evidence of the following:
 - a. Deterioration, malfunctions, or improper operation of the run-on and run-off control system and liner.
 - b. Presence of leachate in, and proper functioning of, leachate collection, detection and removal systems.

E. SPECIAL REQUIREMENTS FOR INCOMPATIBLE WASTES

1. The Permittee shall not place incompatible wastes, or incompatible wastes and materials in the same area, unless the procedures specified in the approved permit application are followed, 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; and
 - e. Through other like means, threaten human health or the environment.
2. The Permittee shall separate a pile of waste from any incompatible waste or other material that is incompatible with any waste or other material that is stored nearby in containers, other areas, open tanks, or surface impoundments by means of a dike, berm, wall, or other suitable devices.
3. The Permittee shall not place wastes in the same area where incompatible wastes or materials were previously piled, until the base has been decontaminated sufficiently to ensure compliance with Condition IV.E.1.

F. CLOSURE REQUIREMENTS

At closure, all waste and waste residues must be removed from the WSF. Closure of the WSF shall be carried out in accordance with the closure plan in the approved permit application, subject to the following modifications:

1. The Permittee shall notify the Illinois EPA in writing of its intent to close the WSF at least forty-five (45) 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 that these areas have been properly decontaminated and clean closed. The plan shall be approved by the Illinois EPA in writing prior to being implemented. Illinois EPA's review of this plan will be subject to the permit appeal provisions contained in Section 39(a) and Section 40(a) of the Act. The response from the Illinois EPA shall establish:
 - a. The sampling plan;
 - b. What contaminants/parameters must be analyzed for; and
 - c. The levels at which decontamination is considered complete.
2. The concrete surfaces comprising the WSF shall be visually inspected, photographed and any residue adhering to the surface must be removed by scraping and/or brushing. Following this, the concrete surfaces must be steam cleaned and triple rinsed. All sweepings, wash water and rinse water shall be collected and managed as a hazardous waste, unless the Permittee can document that the waste is not hazardous as defined in 35 Ill. Adm. Code 721.103. A qualified Illinois licensed professional engineer must certify that the surface has no cracks, gaps or other defects which would allow waste to migrate through to the underlying soil. Otherwise, sampling in accordance with an approved sampling plan, shall be conducted to verify the underlying soil is uncontaminated.
3. The Permittee shall provide post-closure care in accordance with 35 Ill. Adm. Code Part 724 for the WSF if all 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 shall be modified to require post-closure care for the WSF in accordance with 35 Ill. Adm. Code 724, Subparts G and H.
4. Should post-closure care, as described in Condition IV.F.3, become necessary, the Permittee shall submit an application for permit modification, including an amended closure and post-closure care plan for the WSF, 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 WSF, 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 care of the WSF, if required in accordance with Condition IV.F.3, shall be provided within thirty (30) days following

modification of the permit under the provisions of Condition IV.F.4. The approved closure cost estimate for this unit is identified in Attachment E.

6. Within sixty (60) days after closure of the WSF 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 H or a certification with identical wording must be used. Signatures must meet the requirements of 35 Ill. Adm. Code Section 702.126. The qualified Illinois licensed professional 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 qualified Illinois licensed professional engineer must be sufficient to determine the adequacy of each critical activity. Financial assurance must be maintained for the WSF until the Illinois EPA approves the closure certification for the unit and allows for release of financial assurance in writing. Illinois EPA's review of closure certification for partial or final closure will be conducted in accordance with 35 Ill. Adm. Code 724.1102.

A Closure Documentation Report must 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; and
 - h. A scale drawing of all excavated or decontaminated areas and sample locations.
7. The Permittee shall obtain any necessary permits for waste disposal prior to initiating excavation activities. The Permittee shall not create regulated waste pile units by storing the excavated hazardous waste in piles. The permit exemption (35 Ill. Adm. Code 722.117) only applies to containers and tanks.

8. Hazardous waste operations and emergency response activities conducted under this permit must be in accordance with the requirements of 29 CFR Part 1910.
9. If the Illinois EPA determines that implementation of this closure plan fails to satisfy the requirements of 35 Ill. Adm. Code 724.211, the Illinois EPA reserves the right to amend the closure plan. Revisions of closure plans are subject to the appeal provisions contained in Section 39(a) and Section 40(a) of the Act.
10. The Permittee shall analyze all samples individually (i.e., no compositing). Sampling and analytical procedures shall be conducted in accordance with the latest edition of SW-846, Testing Methods for Evaluating Solid Wastes and the Illinois EPA's Guidance for Preparing RCRA Closure Plans. Sample size per interval shall be minimized to prevent dilution of any contamination. Apparent visually contaminated material within a sampling interval shall be included in the sample portion of the interval to be analyzed.

G. RECORDKEEPING AND REPORTING

Throughout the active life of the WSF, if the Permittee detects a condition that could lead to or has caused a release of hazardous waste, the Permittee must repair the condition promptly, in accordance with the following procedures:

1. Upon detection of a condition that has led to a release of hazardous waste (e.g., upon detection of leakage from the primary barrier) the Permittee must:
 - a. Enter a record of the discovery in the facility operating record;
 - b. Immediately remove the portion of the WSF affected by the condition from service;
 - c. Determine what steps must be taken to repair the WSF and establish a schedule for accomplishing the cleanup and repairs; and
 - d. Within seven (7) days after the discovery of the condition, notify the Illinois EPA of the condition, and within fourteen (14) working days, provide a written notice of the condition to the Illinois EPA with a description of the steps taken to repair the WSF, and the schedule for accomplishing the work.
2. The Illinois EPA will review the information submitted, make a determination regarding whether the WSF must be removed from service completely or partially until repairs or cleanup are complete, and notify the Permittee of the determination and underlying rationale in writing.
3. Upon completion of all repairs and cleanup, the Permittee must notify the Illinois EPA in writing and provide a verification, signed by a qualified Illinois licensed

professional engineer, that the repairs and cleanup have been completed according to the written plan submitted in accordance with Condition IV.G.1.

SECTION V: SURFACE IMPOUNDMENT

A. SUMMARY

A hazardous waste surface impoundment, designated as Runoff Retention Basin 1 (RRB1), may contain a maximum of 2.2 million gallons of liquid consisting of non-contact stormwater and leachate collected from the leachate collection systems of the landfill areas. The liquid in RRB1 must be managed as listed hazardous waste (waste code F039). RRB1 has been constructed with a double synthetic liner system and a leak detection system.

This section presents permit conditions for RRB1 according to the regulatory requirements of 35 Ill. Adm. Code 724, Subpart G (Closure) and Subpart K (Surface Impoundments).

B. WASTE IDENTIFICATION

1. RRB1 is located within the facility as shown on Attachment I.
2. The Permittee may store the following hazardous and non-hazardous wastes in RRB1, subject to the terms of this permit:

Surface Impoundment Designation	Capacity (million gallons)	Description of Hazardous Waste
Runoff Retention Basin 1 (RRB1)	2.2	See Attachment C for Waste List and Hazardous Waste Numbers.

3. The Permittee is prohibited from storing waste in RRB1 not identified in Condition V.B.2.

C. DESIGN AND OPERATING REQUIREMENTS

1. The Permittee shall operate and maintain the leak detection system between the liners in accordance with the design plans and reports contained in the approved permit application. The Permittee shall manage the leachate collected from the leak detection system as a hazardous waste.
2. The Permittee shall operate and maintain the RRB1 to prevent overtopping in accordance with the detailed design plans and operating practices contained in the approved permit application.
3. The Permittee shall maintain the RRB1 dikes according to the detailed design plans and operating practices contained in the approved permit application.

D. REPORTING

1. The Permittee shall notify the Illinois EPA in writing within seven (7) days after detecting either a leak in the RRB1 dike or a sudden drop in the liquid level (and the drop is not known to be caused by changes in the flows into or out of the RRB1).

E. INSPECTIONS

1. The Permittee shall inspect the RRB1 (including the liner, cover systems, leak detection system, and appurtenances for control of overtopping) in accordance with Attachment A.
2. If the RRB1 is removed from service for more than six (6) months, then prior to returning to service, the Permittee shall obtain a certification from a qualified Illinois licensed professional engineer that the RRB1's dike, including that portion of any dike which provides freeboard, has structural integrity. The certification must be submitted to the Illinois EPA prior to returning to service.

F. SPECIAL REQUIREMENTS FOR IGNITABLE WASTES

The Permittee shall not place ignitable waste in the RRB1.

G. SPECIAL REQUIREMENTS FOR INCOMPATIBLE WASTES

1. The Permittee shall not place incompatible wastes, or incompatible wastes and materials, in the RRB1, unless the procedures specified in the approved permit application are followed.
2. In accordance with the regulations, incompatible wastes or materials must not be placed in the RRB1 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; and
 - e. Through other like means, threaten human health or the environment.

H. CLOSURE REQUIREMENTS

At closure, all waste, liners, and equipment must be removed from the RRB1. Closure of the RRB1 shall be carried out in accordance with the closure plan in the approved permit application, subject to the following modifications:

1. The Permittee shall notify the Illinois EPA in writing of its intent to close the RRB1 at least sixty (60) 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 that this unit will be clean closed. The plan shall be approved by the Illinois EPA in writing prior to being implemented. The Illinois EPA's review of this plan will be subject to the permit appeal provisions contained in Section 39(a) and Section 40(a) of the Act. The response from the Illinois EPA shall establish:
 - a. The sampling plan;
 - b. What contaminants/parameters must be analyzed for; and
 - c. The levels for which the unit may be considered clean closed.
2. Sampling in accordance with an approved sampling plan, shall be conducted to verify the underlying soil is uncontaminated.
3. The Permittee shall maintain and monitor the groundwater monitoring system and comply with other applicable regulations of 35 Ill. Adm. Code 724, Subpart F during the closure period.
4. The Permittee shall provide post-closure care in accordance with 35 Ill. Adm. Code Part 724 for the RRB1 if all the contaminated soils cannot be practicably removed 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 shall be modified to require post-closure care for the RRB1 in accordance with 35 Ill. Adm. Code 724, Subparts G and H.
5. Should post-closure care, as described in Condition V.H.4, become necessary, the Permittee shall submit an application for permit modification, including an amended closure and post-closure care plan for the RRB1, within thirty (30) days following a determination 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 RRB1, the modification request shall be made no later than sixty (60) days after the determination is made.
6. Financial assurance for closure and post-closure care of the RRB1, if required in accordance with Condition V.H.4, shall be provided within thirty (30) days following modification of the permit under the provisions of Condition V.H.5.

7. Within sixty (60) days after closure of the RRB1 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 H or a certification with identical wording must be used. Signatures must meet the requirements of 35 Ill. Adm. Code 702.126. The qualified Illinois licensed professional 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 qualified Illinois licensed professional engineer must be sufficient to determine the adequacy of each critical activity. Financial assurance must be maintained for the RRB1 until the Illinois EPA approves the closure certification for the unit and allows for release of financial assurance in writing. The Illinois EPA's review of closure certification for partial or final closure will be conducted in accordance with 35 Ill. Adm. Code 724.328.

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

- a. The volume of waste and contaminated soils 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; and
 - h. A scale drawing of all excavated areas and sample locations.
8. The Permittee shall obtain any necessary permits for waste disposal prior to initiating excavation activities. The Permittee shall not create regulated waste pile units by storing the excavated hazardous waste in piles. The permit exemption (35 Ill. Adm. Code 722.117) only applies to containers and tanks.
 9. Hazardous waste operations and emergency response activities conducted under this permit must be in accordance with the requirements of 29 CFR Part 1910.

10. If the Illinois EPA determines that implementation of this closure plan fails to satisfy the requirements of 35 Ill. Adm. Code 724.211, the Illinois EPA reserves the right to amend the closure plan. Revisions of closure plans are subject to the appeal provisions contained in Section 39(a) and Section 40(a) of the Act.
11. The permittee shall analyze all samples individually (i.e., no compositing). Sampling and analytical procedures shall be conducted in accordance with the latest edition of SW-846, Testing Methods for Evaluating Solid Wastes and the Illinois EPA's Guidance for Preparing RCRA Closure Plans. Sample size per interval shall be minimized to prevent dilution of any contamination. Apparent visually contaminated material within a sampling interval shall be included in the sample portion of the interval to be analyzed.
12. The approved closure cost estimate for the RRB1 is identified in Attachment E.

SECTION VI: POST-CLOSURE

A. SUMMARY

This Section presents permit conditions for the landfill according to the regulatory requirements of 35 Ill. Adm. Code 724, Subpart G (Post-Closure).

The Permittee operates an approximate 120-acre facility, of which sixty-four (64) acres consisted of seven (7) hazardous waste disposal areas (identified in Condition VI.B.1) that make up the hazardous waste landfill (landfill) at the facility. The Illinois EPA received certification of closure of the final portion of the sixty-four (64) acre landfill on January 7, 2014. Post-closure care for the landfill, consisting of the seven (7) landfill areas, was determined to have started on January 7, 2014 when the Illinois EPA accepted the certification of closure on March 28, 2014.

The post-closure care period for the landfill shall continue for at least thirty (30) years. Groundwater monitoring will continue through the post-closure care period for established monitoring wells. Inspections during this period must identify any maintenance needed. The integrity of the final cover system, including soil and membrane cap, and vegetation must be maintained. A detailed written record of these activities must be kept at the facility.

B. UNIT IDENTIFICATION

1. The Permittee shall provide post-closure care for the landfill (seven (7) hazardous waste disposal areas), identified in the following table and described in the approved permit application, subject to the terms and conditions of this permit:

<u>Landfill Area Name</u>	<u>Approximate Capacity (cubic yards)</u>	<u>Approximate Surface Area (acres)</u>
Barrel Trench (Area 1)	35,000	14
Section A	6,500	8
Section B	190,000	10
Trench C-1 (Area C)	425,929	7.3
Trench C-2 (Area C)	453,846	6.4
Trench C-3 (Area C)	775,939	7.3
Trench C-4 (Area C)	982,865	11
Total	2,870,079	64

2. The location and horizontal extents of the landfill areas are identified on the map in Appendix L-1 of the approved permit application and Attachment I. The lowest elevation of the sumps in the landfill areas are at or above elevation 578 feet mean seal level (ft-MSL). The highest elevation of the final cover system is at or below

elevation 670 ft-MSL. The slopes of the final cover system are no steeper than a 5% grade. The landfill areas were designed to achieve a minimum static slope factor of safety greater than or equal to 1.5 and a seismic factor of safety greater than or equal to 1.3.

3. The bottom liner system(s) of the landfill areas was constructed as follows.
 - Two (2) areas (The Barrel Trench Area and Section A) have compacted soil liners;
 - One (1) area (Section B) has compacted soil under HDPE liner and a leachate collection system above both liners; and
 - The remaining areas (Trenches C-1 through C-4) have a double HDPE liner with leachate collection and leak detection system, all over a compacted soil liner.
4. The components of the final cover system consist of the following from top to bottom.
 - 12" blended topsoil layer;
 - 24" minimum protective random fill;
 - Geotextile (prevents migration of fines & clogging of HDPE drainage net);
 - HDPE drainage net;
 - HDPE smooth 40-mil minimum synthetic cover liner (geomembrane);
 - 18" thick impervious fill layer; and
 - 12" thick impervious fill subgrade – random fill (thickness varies).
5. A survey plat indicating the location and dimensions of the landfill areas with respect to permanently surveyed benchmarks was prepared and certified by an Illinois professional land surveyor. The notes on the plat state the owner's and operator's obligation to restrict disturbance of the landfill areas in accordance with the applicable requirements in 35 Ill. Adm. Code 724, Subpart G. These notes state:
 - a. The waste materials contained in the hazardous waste disposal units are considered RCRA hazardous wastes.
 - b. Any material removed from the hazardous waste disposal units during future activities must be managed as a hazardous waste in accordance with 35 Ill. Adm. Code Subtitle G: Waste Disposal.
 - c. The use of this area is restricted.
6. The Plat of Survey (part of PIN 13-36-126-005) and Drawing No. 313631 were filed with the Peoria County Recorder's Office in Peoria, IL on January 29, 2014. The record data is Document No. 2014-001755.

The Plat of Survey was attached to the deed to the property and serves as an instrument which is normally examined during title search that will in perpetuity notify any potential purchaser of the property that:

- a. The waste material in the hazardous waste disposal units is considered a RCRA hazardous waste;
- b. Use of the area is restricted; and
- c. A survey plat and record of the type, location and quantity of waste material in the hazardous waste disposal units was filed with the Illinois EPA and the County Recorder.

C. POST-CLOSURE CARE PERIOD

1. The post-closure care period for the landfill (seven (7) landfill areas) began on January 7, 2014, the date of completion of closure of the final portion of the landfill areas listed in Condition VI.B.1. Post-closure care for the landfill will continue for at least thirty (30) years after that date.

Post-closure care shall continue to be extended for an additional 30-year period or until such time as no unacceptable risks to human health and the environment are present in the landfill, as determined by the Illinois EPA.

2. On or prior to January 7, 2043 (one year before January 7, 2044), the Permittee must submit a Class 2 permit modification request to the Illinois EPA in accordance with 35 Ill. Adm. Code 703.241(a)(2) and 35 Ill. Adm. Code 703 Appendix A.E.2 to extend the post-closure care of the landfill for an additional 30-year period or until such time as not unacceptable risks to human health and the environment are present in the landfill, as determined by the Illinois EPA, as specified in Condition VI.C.1.
3. The Illinois EPA may include restrictions upon the future use of the site if necessary to protect public health and the environment, including permanent prohibition of the use of the site for purposes which may create an unreasonable risk of injury to human health or the environment. After administrative and judicial challenges to such restrictions have been exhausted, the Illinois EPA shall file such restrictions of record in the Office of the Recorder of the county in which the hazardous waste disposal site is located.
4. The Permittee shall not allow the property where the landfill areas identified in Condition VI.B.1 are located to be used in a way that could disturb the integrity of the final cover, liners any components of the containment system, or function of the facility's monitoring systems unless the Illinois EPA finds, by way of a permit modification, that such use is necessary for either of the following reasons:

- a. It is necessary to the proposed use of the property, and will not increase the potential hazard to the public health or the environment, or
 - b. It is necessary to reduce a threat to human health or the environment.
5. The Illinois EPA may require, at partial and final closure, continuation of the security requirements during part or all of the post-closure care period.

D. INSPECTIONS

1. The Permittee shall inspection the components, structures, and equipment at the site in accordance with the inspection schedule in Attachment B and the conditions in this permit.
2. The Permittee shall inspect the closed landfill areas identified in Condition VI.B.1 at least semi-annually and within seventy-two (72) hours of any rainfall event of three (3) or more inches in a twenty-four (24) hour period for evidence of any of the following:
 - a. Deterioration, malfunctions, or improper operation of run-on and run-off systems.
 - b. The deterioration of the cover systems.
3. Appropriate corrective action shall be taken if problems, including erosion, blockage of channels, slope failure, etc. are observed at any time. If corrective action is taken, the area involved shall be reinspected one (1) month following completion of the work to ensure the corrective actions have adequately corrected the problem(s) noted.
4. Results of all inspections and a description of any remedial actions taken shall be documented in the facility's operating record and maintained for the entire post-closure care period.

E. MONITORING, MAINTENANCE, AND RECORDKEEPING

1. The Permittee shall keep and maintain a written operating record that includes all the records, reports, notification, monitoring data, testing or analytical data, and corrective action data required by 35 Ill. Adm. Code 724.173 and the conditions in this permit, for the entirety of the post-closure care period. The operating record shall be kept onsite at the facility and available for Illinois EPA review.
2. The Permittee shall comply with the requirements for landfills described in the approved permit application and the conditions of this permit as follows:

- a. Maintain the integrity and effectiveness of the final cover, including making repairs to the cap as necessary to correct the effects of settling, subsidence, erosion, cracking or other events.

Corrective action shall be taken if ponding has been observed, if cracks or erosion channels greater than one (1) inch wide have formed, if gas, odor, vegetative or vector problems arise, if leachate popouts or seeps are present, or if vegetation with tap roots is found to be growing in areas which are not designed to accommodate such.

- b. Continue to operate the landfill leachate collection and removal systems until the volume of leachate is such that leachate can no longer be removed from the systems.
- c. Prevent run-on and run-off from eroding or otherwise damaging the final cover. At a minimum the run-on control system shall be capable of preventing flow onto the landfill area during peak discharge from a 24-hour, 25-year storm event. At a minimum the run-off control system shall be capable of collecting and controlling the volume of water resulting from a 24-hour, 25-year storm event.
- d. Maintain and monitor the groundwater monitoring systems and comply with all other applicable requirements of 35 Ill. Adm. Code 724, Subpart F (Groundwater Protection) during the post-closure care period.
- e. Protect and maintain surveyed benchmarks used in complying with surveying and recordkeeping requirements.

F. NOTICES AND CERTIFICATION

1. A request to change the approved post-closure plan must be submitted in the form of a permit modification request. This request must be in accordance with applicable requirements of 35 Ill. Adm. Code Parts 702, 703, and 724 and must include a copy of the amended post-closure plan for approval by the Illinois EPA.
2. If the Permittee or any subsequent owner or operator of the land upon which a hazardous waste disposal unit is located wishes to remove hazardous wastes and hazardous waste residues, the liner, if any, or contaminated soils, a modification request to this permit in accordance with the applicable requirements in 35 Ill. Adm. Code Parts 703, 705, and 724 must be submitted for the Illinois EPA's review and approval. The owner or operator must at a minimum demonstrate that the removal of hazardous wastes will satisfy the criteria of 35 Ill. Adm. Code 724.217(c).
3. If the Permittee seeks to demonstrate that they should be allowed to end the post-closure care period (e.g., all leachate removed, all waste has been removed, and

leachate and groundwater monitoring results do not indicate a potential for migration of waste at levels which may be harmful to human health and the environment), the Permittee shall submit a proposed Environmental Covenant (EC) for the future land use and long-term management of the property on which the closed landfill units are located. The proposed EC shall be submitted at least one year prior to the date the Permittee expects to submit the Certification of Completion of Post-Closure.

Pursuant to Section 39(g) of the Environmental Protection Act, the purpose of the EC is to place restrictions upon the future use of the site necessary to protect public health and the environment, including permanent prohibition of the use of the site for purposes which may create an unreasonable risk of injury to human health or the environment. The EC shall be pursuant to a consent order between the Permittee and the State of Illinois and in the format specified by Illinois EPA.

4. If the Permittee seeks to exit post-closure care, the Permittee shall submit the following documents to the Illinois EPA Bureau of Land Permit Section by registered mail no later than sixty (60) days after completion of the established post-closure care period for the landfill areas listed in Condition VI.B.1:
 - a. A properly completed Certification of Completion of Post-Closure that states the post-closure care for the landfill was performed in accordance with the specifications in the approved post-closure plan in the approved permit application and the conditions in this permit. The owner and operator and a qualified Illinois licensed professional engineer must sign the certification.
 - b. A Post-Closure Documentation Report that documents the post-closure care conditions and activities at the facility during the post-closure care period. The Post-Closure Documentation Report must include the following:
 - i. Background information about the facility and the unit subject to the post-closure care certification. Describe the facility and RCRA permit history of the unit.
 - ii. A detailed description of the unit subject to the post-closure care certification that includes:
 1. The unit's design, including liner system, sumps, leachate collection, leak detection, gas systems, and cover system including stormwater run-off and run-on controls. Provide this information in both a narrative form and scaled drawings.
 2. How it was operated, and how it was closed.

3. When it was operated, and when it was closed.
 4. The wastes disposed of in the unit (including waste codes).
 5. A scaled map showing location of the unit within the facility. Include all wells in the groundwater monitoring system for the unit on this map.
 6. A survey of the unit when it was certified closed and at the time the Post-Closure Documentation Report is submitted (e.g., when the post-closure period ended). The surveys must be certified by a professional land surveyor.
- iii. A general discussion on the inspection and maintenance of, and repairs to, the cover system, leachate collection, leak detection, gas collection, stormwater run-off & run-on controls, and wells in the groundwater monitoring system. Describe any problems and/or repairs to these systems that were addressed over the post-closure care period in chronological order. Show the locations of each of the repairs to these systems during post-closure care on a scaled drawing of the unit.
 - iv. A discussion on the groundwater monitoring program, including any corrective measures that were completed during the post-closure care period and a summary of the three (3) most recent years of groundwater data. Identify the horizontal and vertical extent of any groundwater contaminant plume from the unit that existed at the beginning of the post-closure care period and every five (5) years after that. The facility must have complied with all requirements of 35 Ill. Adm. Code Parts 620 and 724 in order to certify completion of post-closure care activities.
 - v. Colored photos of unit(s) at post-closure completion. Photo documentation of the unit should include at least one (1) aerial (satellite) photo and representative photos of above-ground design features of the unit.
 - vi. Illinois EPA LPC-PA23 Form.
- c. Documentation that the EC required by Condition VI.F.3 has been placed on the deed to the property on which the landfill areas are located and has been filed with the County Recorder's Office.

5. The certification of completions of post-closure care shall not be approved by the Illinois EPA until the Permittee demonstrated that the EC required by Condition VI.F.3 has been properly filed with the appropriate governmental office (e.g., State of Illinois, or County Recorder's office).

6. Illinois EPA shall notify the owner or operator that it is no longer required to maintain financial assurance for post-closure care of that unit in accordance with 35 Ill. Adm. Code 724.220 and 724.245(i) within sixty (60) days after receiving an approvable application and certifications from the owner or operator and a qualified Illinois licensed Professional Engineer that the post-closure care has been completed in accordance with the approved post-closure plan. Should the Illinois EPA determine that post-closure care has not been in accordance with the approved post-closure plan and conditions of this permit, the Illinois EPA shall provide the owner or operator with a detailed written statement of any such determination that post-closure care has not been in accordance with the approved post-closure plan and conditions of this permit.

SECTION VII: GROUNDWATER DETECTION MONITORING PROGRAM

A. SUMMARY

Groundwater parameters monitored in the uppermost aquifer below the facility indicate that, at the present time, no groundwater impacts have occurred. Therefore, a groundwater detection monitoring program meeting the requirements of 35 Ill. Adm. Code 724.198 shall be implemented at the facility.

The Permittee has twenty-three (23) existing wells to monitor groundwater in the Lower Sand that are utilized for the groundwater detection monitoring program. The average depth to groundwater in the deep wells is 145 feet below ground surface. The groundwater detection monitoring program will therefore consist of eighteen (18) downgradient wells and five (5) upgradient wells.

B. IMPLEMENTATION

1. The Permittee shall implement the detection monitoring program upon the effective date of this permit. On that date, the groundwater monitoring requirements set forth in this permit shall supersede those previously established.
2. The Permittee shall carry out the detection monitoring program specified in this permit on the groundwater beneath the PDC Landfill Facility in Peoria, Illinois. The uppermost aquifer in the vicinity of the facility has been identified as the sand and gravel deposits occurring in the Lower Sand. For the purpose of this permit and in accordance with the 35 Ill. Adm. Code Part 620 regulations, the uppermost aquifer has been designated Class I: Potable Resource Groundwater.
3. The Point of Compliance, defined as the vertical surface located at the hydraulically downgradient limit of the waste management area that extends down into the uppermost aquifer underlying the regulated unit, is delineated by the well identified as the point of compliance well in Condition VII.C.1.

C. WELL LOCATION AND CONSTRUCTION

1. The Permittee shall install and maintain groundwater monitoring wells and piezometers at the locations identified in the following table to allow for the collection of groundwater samples and elevations from the uppermost aquifer. The locations of these wells and piezometers are specified in the approved permit application.

Groundwater Detection Monitoring Program Wells

<u>Well No.</u>	<u>Position (upgradient or downgradient)</u>	<u>Note</u>	<u>Area</u>	<u>Well Depth (Ft-bgs⁴)</u>	<u>Bottom of Well Elevation (Ft-MSL²)</u>	<u>Well Screen Interval (Ft-MSL²)</u>
A122	Upgradient		BT	146.0	457.6	458.1-468.1
R128	Upgradient		BT	130.4	461.0	461.5-471.5
R132	Upgradient		BT	127.0	462.7	463.2-473.2
A133	Upgradient		BT	111.0	468.3	468.8-478.8
A134	Upgradient		BT	123.0	465.5	466.0-476.0
G120	Downgradient	1, 3	A	184.0	428.9	429.4-449.4
R121	Downgradient		A	145.8	459.7	460.2-470.2
G140	Downgradient		WT	201.4	455.6	456.1-466.1
R119	Downgradient	1	B	193.6	423.8	424.0-434.0
A126	Downgradient		B	153.5	457.7	458.2-468.2
G139	Downgradient		B	173.5	456.1	456.6-466.6
R125	Downgradient		B	157.0	457.7	458.2-468.2
R113	Downgradient	1	C	194.0	416.0	416.5-436.5
R129	Downgradient		C	169.0	458.8	459.3-469.3
R130	Downgradient		C	162.0	460.3	460.8-470.8
R131	Downgradient		C	154.0	460.0	460.5-470.5
G136	Downgradient		C	123.0	449.1	449.6-459.6
G137	Downgradient		C	141.0	447.4	447.9-457.9
R138	Downgradient		C	163.5	449.4	449.9-459.9
G135	Downgradient		C	144.81	451.39	461.15-451.4
G142	Downgradient		A	166.57	437.63	447-437.6
G143	Downgradient		B	183.6	451.87	461.9-451.9
G144	Downgradient		C	175.2	453.01	462.65-453

Notes:

- 1 = PVC Well, twenty foot screen
- 2 = (Ft-MSL) Feet above Mean Sea Level
- 3 = Point of Compliance Well
- 4 = (Ft-bgs) Feet Below Ground Surface

Area monitored by designated wells:

- A = Section A
- B = Section B

C = Area C
BT = Barrel Trench
WT = Wastewater Treatment Unit (Non-hazardous)

Well Designations:

G = Groundwater Monitoring Well
R = First Groundwater Monitoring Replacement Well
A = Second Groundwater Monitoring Replacement Well

2. Construction of any new monitoring well/piezometer must be at a minimum in accordance with the Monitoring Well Diagram which can be found on the Illinois EPA's website, unless otherwise approved in writing by the Illinois EPA. Any new monitoring well/piezometer to be installed must be continuously sampled and logged on Illinois EPA boring logs which can also be found on the Illinois EPA's website.
3. The Permittee shall notify the Illinois EPA within thirty (30) days in writing if any of the wells identified in Condition VII.C.1 are damaged, or the structural integrity has been compromised. A proposal for the replacement of the subject well shall accompany this notification. The well shall not be plugged until the new well is on-line and monitoring data has been obtained and verified unless the well is extremely damaged and would create a potential route for groundwater contamination. Prior to replacing the subject well, the Permittee shall obtain written approval from the Illinois EPA regarding the proposed installation procedures and construction.
4. Should any well become consistently dry or unserviceable; a replacement well shall be provided within ten (10) feet of the existing well. This well shall monitor the same geologic zone as the existing well and be constructed in accordance with the current Illinois EPA groundwater monitoring well construction standards at the time that the well is replaced. A well which is more than ten (10) feet from the existing well or does not monitor the same geologic zone must be approved by the Illinois EPA and designated as a new well.
5. The Permittee shall submit boring logs, construction diagrams and data sheets from installation and development of a new or replacement well to the Illinois EPA at the following address within thirty (30) days of the date that installation of the well is completed. In addition, the Permittee shall submit certification that plugging and abandonment of a well was carried out in accordance with the approved procedures to the Illinois EPA at the following address within thirty (30) days of the date that the well is plugged and abandoned. All information should be submitted to the appropriate State Agencies.

Illinois Environmental Protection Agency
Bureau of Land - #33
Permit Section
1021 North Grand Avenue East
Post Office Box 19276
Springfield, Illinois 62794-9276

6. All wells/piezometers shall be equipped with protective caps and locks. Monitoring wells or piezometers located in high traffic areas must be protected with bumper guards.
7. All groundwater monitoring wells and piezometers not utilized in the groundwater monitoring system, but retained by the facility must be constructed and maintained in accordance with 77 Ill. Adm. Code Part 920 regulations. Monitoring wells and piezometers that are improperly constructed must be abandoned in accordance with Conditions VII.C.3.

D. MONITORING PARAMETERS

1. The Permittee shall determine groundwater quality at groundwater monitoring wells identified in Condition VII.C.1, at upgradient, downgradient, and point of compliance locations semi-annually during the active life (including closure and post-closure care) of the landfill. Samples collected during the semi-annual events of each year shall be analyzed for the following field parameters and hazardous waste constituents.

List G1 – Semi-Annual Groundwater Sampling

<u>Field Parameters</u>	<u>Storet Number</u>	<u>Reporting Units</u>
pH	00400	Standard
Specific Conductance	00094	micromos/cm
Temperature of Water Sample	00011	(°F)
Turbidity	45626	Ntus
Depth to Water (below land surface)	72019	Feet
Depth to Water (below measuring point)	72109	Feet
Elevation of Bottom of Well#	72020	Ft-MSL
Elevation of Groundwater Surface	71993	Ft-MSL
Elevation of Measuring Point (top of casing)##	72110	Ft-MSL

Shall be determined during the second sampling event each year.

Shall be surveyed once every five (5) years, or at the request of the Illinois EPA, or whenever the elevation changes as required by Condition VII.F.2.

<u>Hazardous Waste Constituents</u>	<u>Storet Number</u>	<u>Reporting Units</u>
<u>Inorganics</u>		
Barium, Ba (dissolved)	01005	ug/l
Cadmium, Cd (dissolved)	01025	ug/l
Chromium (dissolved)	01030	ug/l
Iron, Fe (dissolved)	01046	ug/l
Lead, Pb (dissolved)	01049	ug/l
Manganese, Mn (dissolved)	01056	ug/l
Nickel, Ni (dissolved)	01065	ug/l
Zinc, Zn (dissolved)	01090	ug/l
Calcium, Ca (dissolved)	00915	mg/l
Chloride, Cl (dissolved)	00941	mg/l
Cyanide, CN (total)	00720	ug/l
Sodium, Na (dissolved)	00930	mg/l
Sulfate, SO ₄ (dissolved)	00946	mg/l
<u>Organics</u>		
Vinyl chloride	39175	ug/l
Chloroethane	34311	ug/l
Methylene chloride	34423	ug/l
1,1-dichloroethane	34496	ug/l
Tetrachloroethene	34475	ug/l
1,1,1-trichloroethane	34506	ug/l
Trichlorofluoromethane	34488	ug/l
Chlorobenzene	34301	ug/l
Total Organic Carbon, TOC	00680	mg/l
<u>Semi-Volatile Organics</u>		
Phenols	32730	ug/l

List G2 -- Annual Groundwater Sampling

<u>Hazardous Waste Constituents</u>	<u>Storet Number</u>	<u>Reporting Units</u>
<u>Inorganics</u>		
Antimony (total)	01097	ug/l
Arsenic (total)	01002	ug/l
Barium, Ba (total)	01005	ug/l
Beryllium (total)	01012	ug/l
Boron (total)	01022	ug/l
Cadmium, Cd (total)	01025	ug/l
Chloride, Cl (total)	00941	ug/l
Chromium (total)	01030	ug/l
Cyanide, CN (total)	00720	ug/l
Fluoride (total)	00951	ug/l
Iron, Fe (total)	01046	ug/l
Lead, Pb (total)	01049	ug/l
Manganese, Mn (total)	01056	ug/l
Nickel, Ni (total)	01065	ug/l
Nitrate-Nitrogen	00620	mg/l
Silver (total)	01077	ug/l
Sulfate (total)	00945	ug/l
Total Dissolved Solids (TDS)	70300	ug/l
<u>Organics</u>		
Aalachlor	77825	ug/l
Benzene	34030	ug/l
Bis(2-ethylhexyl)phthalate	39100	ug/l
Ethylbenzene	78113	ug/l
Simazine	39055	ug/l
Toluene	34010	ug/l
Xylene (total)	81551	ug/l
1,2-Dichloroethane	34531	ug/l
2,4,5-TP (Silvex)	39760	ug/l
2,4-Dichlorophenoxyacetic Acid	39730	ug/l
2-Butanone (MEK)	81595	ug/l
4-Methyl-2-Pentanone (MIBK)	78133	ug/l
Methanol	77885	ug/l
n-Butanol	77034	ug/l
2,4-Dimethylphenol	34606	ug/l

Organics

Endosulfan I 34361 ug/l

Semi-Volatile Organics

Phenols 32730 ug/l

Note: All constituents with the "(dissolved)" label to the right shall be determined using groundwater samples which have been filtered through a 0.45 micron filter. Should a parameter be detected in groundwater and found to be statistically above background, the subsequent monitoring event must include total (unfiltered) analysis and a comparison to the appropriate 35 Ill. Adm. Code Part 620, Class I, Groundwater Quality Standard must then take place.

2. Alternate concentration limits may be established in accordance with 35 Ill. Adm. Code 724.194(b) where the Permittee can determine a constituent will not pose a substantial hazard to human health or the environment. The alternate concentration limits proposed by the facility must be approved by the Illinois EPA.
3. The Permittee shall establish background values in accordance with the procedures specified in the approved permit application as well as the following procedures:
 - a. Background groundwater quality (BGQ) for a monitoring parameter or constituent shall be based on data from quarterly sampling of the upgradient groundwater monitoring wells for one (1) year.
 - b. In developing the database used to determine a background value for each parameter or constituent, the Permittee shall take a minimum of four (4) replicate samples from each upgradient well during each of the four (4) quarterly background sampling events. An equal number of replicate samples will be taken from each upgradient well to ensure equal weightings in statistics.
 - c. For those monitoring parameters or constituents not detected above the practical quantitation limit (PQL) during background gathering, the PQL shall be the established background value.

E. DETECTION MONITORING PROGRAM

1. The Permittee shall determine groundwater quality at each monitoring well at the compliance point identified in Condition VII.C.1 semi-annually during the active life of the regulated unit (including the closure and post-closure care periods). The Permittee shall express the groundwater quality at each monitoring well in a form necessary for the determination of statistically significant changes (i.e. means, variances, etc.).

2. The Permittee shall determine the groundwater flow rate and direction in the uppermost aquifer semi-annually and report to the Illinois EPA, at least annually, from monitoring wells identified in Condition VII.C.1
3. The Permittee shall evaluate the results of the analysis required by Condition VII.D.1 and identify:
 - a. The concentration of any constituent detected which was not detected in the previous sampling event.
 - b. The concentration of any constituent detected which exhibits a progressive increase over four (4) consecutive sampling events.
4. The Permittee shall determine whether there is a statistically significant increase, (or decrease in the case of pH) over the background values established for each parameter identified in Condition VII.D.1 each time groundwater quality is determined at the point of compliance. In determining whether such a change has occurred, the Permittee must compare the groundwater quality at each monitoring well identified in Condition VII.C.1 to the BGQ derived in accordance with the statistical procedures specified in the approved permit application.
5. The Permittee shall perform the evaluations described in Conditions VII.E.1, VII.E.2, VII.E.3 and VII.E.4 within sixty (60) days after completion of semi-annual sampling.

F. GROUNDWATER ELEVATION

1. The Permittee shall determine the groundwater surface elevation referenced to Ft-MSL at each well each time groundwater is sampled in accordance with Condition VII.I.3.
2. The Permittee shall determine the surveyed elevation of "stick-up" referenced to Ft-MSL when the well is installed (with as-built diagrams) and every five (5) years, or at the request of the Illinois EPA, or whenever the elevation changes in accordance with Condition VII.I.5.
3. Elevation, as referenced to Ft-MSL, of the bottom of each monitoring well (Storet No. 72020), is to be reported at least annually. The mandatory measurement shall be taken during the second semi-annual sampling event each year.

G. SAMPLING AND ANALYTICAL PROCEDURES

1. The Permittee shall use the techniques and procedures described in the approved permit application, except as modified below, when obtaining and analyzing samples from the groundwater monitoring wells described in Condition VII.C.1:

- a. Samples shall be collected using the techniques described in the approved permit application.
 - b. Samples shall be preserved and shipped (when shipped off-site for analysis) in accordance with the procedures specified in the approved permit application.
 - c. Samples shall be analyzed in accordance with the procedures specified in the approved permit application.
 - d. Samples shall be tracked and controlled using the chain-of-custody procedures specified in the approved permit application.
2. Samples will be collected first from upgradient wells, proceeding to non-contaminated downgradient wells, and then proceeding to the downgradient wells which are known to be contaminated.
 3. Purging of groundwater must continue until field parameters (pH, specific conductance, temperature, and turbidity) have stabilized within approximately 10% over at least two (2) measurements collected over three (3) to five (5) minute intervals. If a well is purged to dryness or is purged such that the full recovery exceeds two (2) hours, the well should be sampled as soon as sufficient volume of groundwater has entered the well to enable the collection of the necessary groundwater samples.
 4. Purged groundwater must be collected, containerized, and disposed of properly. Water collected during purging activities must be collected then immediately managed as leachate.
 5. Analytical methods to be utilized by the facility must be in accordance with the latest promulgated version of USEPA's "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods" (SW-846).
 6. Quality assurance/quality control procedures which meet the general requirements of SW-846 must be implemented during all sampling and analysis efforts. In addition, sample collection, handling, preservation, preparation, and analysis must be conducted in accordance with the procedures set forth in SW-846.

H. STATISTICAL PROCEDURES

When evaluating the monitoring results in accordance with Condition VII.E, the Permittee shall use the following procedures:

1. When a constituent's background value has a sample coefficient of variation less than 1.00, the Permittee shall conduct the following statistical procedures:

The Permittee shall take at least four (4) samples from each well at the compliance point and determine whether the difference between the mean of the constituent at each well (using all portions taken) and the background value established for the constituent is significant at the 0.05 level using the Averaged Replicate t-test, as described in Attachment D. If the test indicates that the difference is significant, the Permittee shall repeat the same procedure within ten (10) days (with at least the same number of portions as used in the first test) with a fresh sample from the monitoring well. If this second round of analysis indicates that the difference is significant, the Permittee shall conclude that a statistically significant change has occurred.

2. Where the PQL is used for a background value a tolerance range of two (2) times the PQL will be established. If an observed value is above the tolerance range or any two (2) or more parameter values for that well exceed the established PQL, the Permittee shall repeat the procedure within ten (10) days after receiving the laboratory data with a fresh sample from that well. If the observed value from the second sampling again fails any of the comparisons, the Permittee shall conclude that a significant increase has occurred.
3. When a constituent's background value has a sample coefficient of variation greater than or equal to 1.00, the Permittee shall submit a proposed statistical procedure to the EPA for review and approval that is appropriate for the distribution of the data used to establish background values and provides a reasonable balance between the probability of falsely identifying a non-contaminating regulated unit and the probability of failing to identify a contaminating regulated unit. The procedure shall be implemented upon approval by the Illinois EPA.
4. The Permittee shall review monitoring results from four (4) consecutive sampling events to determine if increasing or decreasing pH trends occur. If four (4) consecutive events of an increasing or decreasing trend is noted, then the Permittee shall collect a confirmation sample for reanalysis from the monitoring well. If the observed value from the second round of sampling again fails the above-described procedure, then the Permittee shall conclude that a statistically significant change has occurred.

I. REPORTING AND RECORDKEEPING

1. The Permittee shall enter all monitoring, testing, and analytical data obtained in accordance with Conditions VII.D, VII.E, VII.F, VII.G and VII.H in the facility's operating record. The data must include all computations, calculated means, variances, t-statistic values and t-statistic results or results of statistical test that the Illinois EPA has determined to be equivalent.
2. Samples collected to meet the requirements of the groundwater monitoring program described in Conditions VII.D, VII.E, VII.F, and VII.H shall be collected

and reported, as identified in the following table. All additional information required by the groundwater monitoring program (as specified in Conditions VII.D, VII.E, VII.F and VII.H) shall also be submitted to the Illinois EPA at the address listed in Condition VII.C.5 in accordance with this schedule.

<u>Samples to be collected during the months of:</u>	<u>Results submitted to the Illinois EPA by the following:</u>	<u>Parameters to be monitored:</u>
April – June	July 15	Lists G1 and G2
October – December	January 15	List G1

3. Groundwater surface elevation measured pursuant to Condition VII.F.1. shall be collected semi-annually and submitted to the Illinois EPA in accordance with the schedule in Condition VII.I.2.
4. The Permittee shall report the groundwater flow rate and direction in the uppermost aquifer as required by Condition VII.E.2 by July 15 each year.
5. The Permittee shall report the surveyed elevation, as required by Condition VII.F.2, of the top of the well casing “stick-up,” referenced to Ft-MSL in accordance with the following schedule:
 - a. For wells identified in Condition VII.C.1, every five (5) years (during the second semi-annual sampling event), or at the request of the Illinois EPA or whenever the elevation changes.
 - b. For any new wells, at the time of installation and reported in the as-built diagrams, subsequent measurements shall be made every five (5) years (during the second semi-annual sampling event), or whenever the elevation changes.
6. Elevation of the bottom of each monitoring well (Storet No. 72020) identified in Condition VII.C.1, as referenced to Ft-MSL, is to be reported at least annually in accordance with Condition VII.F.3 by July 15 each year. This measurement shall be taken during the second semi-annual sampling event each year.
7. Information required by Conditions VII.I.2, VII.I.3, VII.I.5 and VII.I.6 must be submitted in an electronic format. The information is to be submitted in accordance with the schedule found in Condition VII.I.2. Additional guidance regarding the submittal of the information in an electronic format can be found on the Illinois EPA’s website.

8. The Permittee shall submit a completed "RCRA Facility Groundwater, Leachate and Gas Reporting Form" (LPC-592) found on the Illinois EPA's website, as a cover sheet for any notices or reports required by the permit for identification purposes. Only one copy of the LPC-592 must accompany the submittal. However, the Permittee must submit one (1) original and (excluding the groundwater and leachate monitoring results submitted in an electronic format) a minimum of two (2) copies of each notice or report submitted to the Illinois EPA. The form is not to be used for permit modification requests.
9. The Permittee shall report all information to the Illinois EPA in a form which can be easily reviewed. All submittals must contain tables of data, drawings, and text, as necessary, to accurately describe the information contained in the submittal.
10. If the Permittee determines, pursuant to Condition VII.E.4 that there is a statistically significant increase for any of the parameters specified in Condition VII.D.1 at any monitoring well at the point of compliance, the Permittee shall:
 - a. Notify the Illinois EPA in writing indicating what parameters and wells have shown statistically significant increases and provide all statistical calculations. This notification shall be submitted to the Illinois EPA within seven (7) days of the date that the increases are discovered.
 - b. Sample the groundwater in all wells listed in Condition VII.C.1 and determine the concentration of all constituents identified in 35 Ill. Adm. Code 724, Appendix I such that the results will accompany the permit modification required by Condition VII.I.10.d.
 - c. For any 35 Ill. Adm. Code 724, Appendix I compounds found in the analysis pursuant to this condition, the Permittee may resample within one (1) month and repeat the analysis for those compounds detected. If results of the second analysis confirm the initial results, then these constituents will form the basis for compliance monitoring. If the Permittee does not resample for the compounds pursuant to this condition, the hazardous constituents found during the initial 35 Ill. Adm. Code 724, Appendix I analysis will form the basis for compliance monitoring.
 - d. Submit to the Illinois EPA a permit modification request to establish a compliance monitoring program meeting the requirements of 35 Ill. Adm. Code 724.199. The application shall be submitted to the Illinois EPA within ninety (90) days of the date that the increase is discovered. The application must include the following information:
 - i. An identification of the concentration of any 35 Ill. Adm. Code 724, Appendix I constituents found in the groundwater at each monitoring well at the point of compliance;

- ii. Any proposed changes to the groundwater monitoring system at the facility necessary to meet the requirements 35 Ill. Adm. Code 724.199;
 - iii. Any proposed changes to the monitoring frequency, sampling and analysis procedures, or methods or statistical procedures used at the facility necessary to meet the requirements of 35 Ill. Adm. Code 724.199; and
 - iv. For each hazardous constituent found at the point of compliance, a proposed concentration limit under 35 Ill. Adm. Code 724.194(a)(1) or 724.194(a)(2), or a notice of intent to seek an alternate concentration limit for a hazardous constituent under 35 Ill. Adm. Code 724.194(b).
- e. Submit to the Illinois EPA a corrective action feasibility plan to meet the requirements of 35 Ill. Adm. Code 724.200 unless the concentrations of all hazardous constituents identified under Condition VII.I.10.b are listed in 35 Ill. Adm. Code 620.410 and their concentrations do not exceed the respective Groundwater Quality Standards or the Permittee has sought alternate concentration limits under Condition VII.I.10.d.iv for every hazardous constituent identified under Condition VII.I.10.b. This plan must be submitted to the Illinois EPA within 180 days of the date the increase is discovered.
- f. Submit to the Illinois EPA all data necessary to justify any alternate concentration limit for a hazardous constituent sought under Condition VII.I.10.d.iv. This plan must be submitted to the Illinois EPA within 180 days of the date the increase is discovered.
11. If the Permittee determines, pursuant to Condition VII.E.4, that there is a statistically significant increase above the background values for the parameters specified in Condition VII.D.1, the Permittee may demonstrate that a source other than a regulated unit caused the increase or that the increase resulted from error in sampling, analysis, or evaluation. The Permittee shall submit a permit modification request in accordance with Condition VII.I.10.d unless the demonstration successfully shows that a source other than the regulated unit caused the increase or that the increase resulted from errors in sampling, analysis or evaluation and the Illinois EPA concurs.

To make this demonstration, the Permittee shall:

- a. Notify the Illinois EPA in writing that they intend to make this demonstration. This notification must be submitted to the Illinois EPA within seven (7) days of the date that the increase is discovered.

- b. Submit a report to the Illinois EPA which demonstrates that a source other than a regulated unit caused the increase, or that the increase resulted from error in sampling, analysis, or evaluation. This report must be submitted within ninety (90) days of the date that the increase is discovered.
- c. Submit to the Illinois EPA a permit modification request to make any appropriate changes to the groundwater detection monitoring program in accordance with 35 Ill. Adm. Code 703, Subpart G. This permit modification request must be submitted within ninety (90) days of the date that the increase is discovered.
- d. Continue to monitor in accordance with the detection monitoring program at the facility.

J. REQUEST FOR PERMIT MODIFICATION

- 1. If the Permittee determines that the detection monitoring program no longer satisfies the requirements of 35 Ill. Adm. Code 724.198, the Permittee must, within ninety (90) days, submit a permit modification request to the Illinois EPA to make any appropriate changes to the program which will satisfy the regulations.
- 2. Conditions in this section of the Permit may be modified in accordance with 35 Ill. Adm. Code 705.128 if there is cause for such modification, as defined in 35 Ill. Adm. Code 702.184. Causes for modification identified in this section include, but are not limited to, alterations to the permitted facility, additional information which would have justified the application of different permit conditions at the time of issuance, and new regulations.

SECTION VII-A: SHALLOW ZONE GROUNDWATER OBSERVATION MONITORING PROGRAM

A. SUMMARY

In addition to the groundwater detection monitoring program utilized to monitor the uppermost aquifer (Lower Sand) at the facility, the Permittee has six (6) existing wells to monitor groundwater in the shallow groundwater zones (Upper Till) at the facility. These groundwater monitoring wells are intended to detect any releases from the landfill to the Upper Till that could potentially impact the uppermost aquifer (Lower Sand) at the facility.

B. IMPLEMENTATION

1. The Permittee shall implement the shallow zone groundwater observation monitoring program upon the effective date of this Permit. On that date, the shallow zone observation monitoring requirements set forth in this permit shall supersede those previously established.
2. The Permittee shall carry out the shallow zone observation monitoring program specified in this permit on the groundwater beneath the PDC Landfill Facility in Peoria, Illinois. For the purpose of this permit the shallow groundwater zone consists of silty clay till occurring in the Upper Till.

C. WELL LOCATION AND CONSTRUCTION

1. The Permittee shall install and maintain groundwater monitoring wells at the locations identified in the following table to allow for the collection of groundwater samples and elevations from the shallow groundwater zone:

Groundwater Observation Monitoring Program Wells

<u>Well No.</u>	<u>Note</u>	<u>Area</u>	<u>Well Depth (ft-bgs)</u>	<u>Bottom of Well Elevation (Ft-MSL)</u>	<u>Well Screen Interval (Ft-MSL)</u>
G207	1	B	61.0	556.4	570.0-575.0
G208	1	C	61.0	554.2	570.0-575.0
G213	1	C	42.9	545.9	545.9-550.9
G220	1	A	47.5	561.6	561.6-571.6
R243	2	WT	55.0	585.4	585.4-595.4
G242	2	A	35.3	606.6	561.3-571.3

Notes:

- 1 = PVC Well
- 2 = Stainless Steel/PVC Well

Area monitored by designated wells:

- A = Section A
- B = Section B
- C = Area C
- WT = Wastewater Treatment Unit (Non-hazardous)

Well Designations:

- G = Groundwater Monitoring Well
- R = First Groundwater Monitoring Replacement Well

2. Construction of any new monitoring well/piezometer must be at a minimum in accordance with the Monitoring Well Diagram found on the Illinois EPA's website, unless otherwise approved in writing by the Illinois EPA. Any new monitoring well/piezometer to be installed must be continuously sampled and logged on Illinois EPA boring logs which can also be found on the Illinois EPA's website.
3. The Permittee shall notify the Illinois EPA within thirty (30) days in writing if any of the wells identified in Condition VII-A.C.1 are damaged or the structural integrity has been compromised. A proposal for the replacement of the subject well shall accompany this notification. The well shall not be plugged until the new well is on-line and monitoring data has been obtained and verified, unless the well is extremely damaged and would create a potential route for groundwater contamination. Prior to replacing the subject well the Permittee shall obtain written approval from the Illinois EPA regarding the proposed installation procedures and construction.
4. Should any well become consistently dry or unserviceable; a replacement well shall be provided within ten (10) feet of the existing well. This well shall monitor the same geologic zone as the existing well and be constructed in accordance with the current Illinois EPA groundwater monitoring well construction standards at the time that the well is replaced. A well which is more than ten (10) feet from the existing well or does not monitor the same geologic zone must be approved by the Illinois EPA and designated as a new well.
5. The Permittee shall submit boring logs, construction diagrams, and data sheets from installation and development of a new or replacement well to the Illinois EPA at the following address within thirty (30) days of the date that installation of

the well is completed. In addition, the Permittee shall submit certification that plugging and abandonment of a well was carried out in accordance with the approved procedures to the Illinois EPA at the following address within thirty (30) days of the date that the well is plugged and abandoned. All information should be submitted to the appropriate State Agencies.

Illinois Environmental Protection Agency
Bureau of Land - #33
Permit Section
1021 North Grand Avenue East
Post Office Box 19276
Springfield, Illinois 62794-9276

6. All wells shall be equipped with protective caps and locks. Monitoring wells located in high traffic areas must be protected with bumper guards.
7. All wells not utilized in the groundwater monitoring system, but retained by the facility, must be constructed and maintained in accordance with 77 Ill. Adm. Code Part 920 regulations. Monitoring wells that are improperly constructed must be abandoned in accordance with Condition VII-A.C.3.

D. MONITORING PARAMETERS

1. The Permittee shall determine groundwater quality at groundwater monitoring wells identified in Condition VII-A.C.1, semi-annually during the active life (including closure and post-closure care) of the landfill. Samples collected during the semi-annual sampling events of each year shall be analyzed for the following field parameters and hazardous waste constituents.

List G1 – Semi-Annual Groundwater Sampling

<u>Field Parameters</u>	<u>Storet Number</u>	<u>Reporting Units</u>
pH	00400	Standard
Specific Conductance	00094	micromhos/cm
Temperature of Water Sample	00011	(°F)
Turbidity	45626	Ntus
Depth to Water (below land surface)	72019	Feet

<u>Field Parameters</u>	<u>Storet Numbers</u>	<u>Reporting Units</u>
Depth to Water (below measuring point)	72109	Feet
Elevation of Bottom of Well *	72020	Ft-MSL
Elevation of Groundwater Surface	71993	Ft-MSL
Elevation of Measuring Point (top of casing) **	72110	Ft-MSL

* Shall be determined during the second sampling event each year.

** Shall be surveyed once every five (5) years, or at the request of the Illinois EPA, or whenever the elevation changes as required by Condition VII-A.F.2.

<u>Hazardous Waste Constituents</u>	<u>Storet Number</u>	<u>Reporting Units</u>
<u>Inorganics</u>		
Barium, Ba (dissolved)	01005	ug/l
Cadmium, Cd (dissolved)	01025	ug/l
Chromium (dissolved)	01030	ug/l
Iron, Fe (dissolved)	01046	ug/l
Lead, Pb (dissolved)	01049	ug/l
Manganese, Mn (dissolved)	01056	ug/l
Nickel, Ni (dissolved)	01065	ug/l
Zinc, Zn (dissolved)	01090	ug/l
Calcium, Ca (dissolved)	00915	mg/l
Chloride, Cl (dissolved)	00941	mg/l
Cyanide, CN (total)	00720	ug/l
Sodium, Na (dissolved)	00930	mg/l
Sulfate, SO ₄ (dissolved)	00946	mg/l
<u>Organics</u>		
Vinyl chloride	39175	ug/l
Chloroethane	34311	ug/l
Methylene chloride	34423	ug/l
1,1-dichloroethane	34496	ug/l
Tetrachloroethene	34475	ug/l
Chlorobenzene	34301	ug/l
Benzene	34030	ug/l
Phenols	32730	ug/l
Toluene	34010	ug/l
Xylene (total)	81551	ug/l
Trans-1,2-Dichloroethene	34531	ug/l
Trichlorofluoromethane	34488	ug/l

Organics

1,1,1-Trichloroethane	34506	ug/l
Methyl Ethyl Ketone	81595	ug/l
Acetone	81552	ug/l
Total Organic Carbon, TOC	00680	mg/l

Note: All constituents with the "(dissolved)" label to the right shall be determined using groundwater samples which have been filtered through a 0.45 micron filter. Should a parameter be detected in groundwater and found to be statistically above background, the subsequent monitoring event must include total (unfiltered) analysis and a comparison to the appropriate 35 Ill. Adm. Code 620, Class I, Groundwater Quality Standard must then take place.

2. Alternate concentration limits may be established in accordance with 35 Ill. Adm. Code 724.194(b) where the Permittee can determine a constituent will not pose a substantial hazard to human health or the environment. The alternate concentration limits proposed by the Permittee must be approved by the Illinois EPA.

E. SHALLOW ZONE OBSERVATION MONITORING PROGRAM

1. The Permittee shall determine groundwater quality at each well identified in Section VII-A.C.1 semi-annually during the active life of a regulated unit (including the closure and post-closure care periods) for constituents found in List G1 of Condition VII-A.D.1. The Permittee shall express the groundwater quality at each monitoring well in a form necessary for the determination of statistically significant changes (i.e., means, variances, etc.)
2. The Permittee shall determine groundwater flow rate and direction in the shallow zone semi-annually and report to the Illinois EPA, at least annually, from monitoring wells identified in Condition VII-A.C.1.
3. The Permittee shall evaluate the results of analysis required by Condition VII-A.D.1 and identify:
 - c. The concentration of any constituent detected which was not detected in the previous sampling event.
 - d. The concentration of any constituent detected which exhibits a progressive increase over four (4) consecutive sampling events.
4. The Permittee shall determine whether there is a statistically significant increase, (or decrease in the case of pH) over the background values established for each parameter identified in Condition VII-A.D.1 each time groundwater quality is determined at each well. In determining whether such a change has occurred, the

Permittee must compare the groundwater quality at each groundwater monitoring well identified in Condition VII-A.C.1 to the background value derived in accordance with the statistical procedures specified in the approved permit application.

5. The Permittee shall perform the evaluations described in Conditions VII-A.E.1, VII-A.E.3, and VII-A.E.4 within sixty (60) days after completion of semi-annual sampling.

F. GROUNDWATER ELEVATION

1. The Permittee shall determine the groundwater surface elevation referenced to Ft-MSL at each well each time groundwater is sampled in accordance with Condition VII-A.I.3.
2. The Permittee shall report the surveyed elevation of "stick-up" referenced to Ft-MSL when the well is installed (with as-built diagrams) and every five (5) years, or at the request of the Illinois EPA, or whenever the elevation changes in accordance with Condition VII-A.I.5.
3. Elevation, as referenced to Ft-MSL, of the bottom of each monitoring well (Storet No. 72020), is to be reported at least annually. The mandatory measurement shall be taken during the second semi-annual sampling event each year.

G. SAMPLING AND ANALYTICAL PROCEDURES

1. The Permittee shall use the techniques and procedures described in the approved permit application, except as modified below, when obtaining and analyzing samples from the groundwater monitoring wells described in Condition VII-A.C.1.
 - a. Samples shall be collected using the techniques described in the approved permit application.
 - b. Samples shall be preserved and shipped (when shipped off-site for analysis) in accordance with the procedures specified in the approved permit application.
 - c. Samples shall be analyzed in accordance with the procedures specified in the approved permit application.
 - d. Samples shall be tracked and controlled using the chain of custody procedures specified in the approved permit application.

2. Purging of groundwater must continue until field parameters (pH, specific conductance, temperature, and turbidity) have stabilized within approximately 10% over at least two (2) measurements collected over three (3) to five (5) minute intervals. If a well is purged to dryness or is purged such that the full recovery exceeds two (2) hours, the well should be sampled as soon as sufficient volume of groundwater has entered the well to enable the collection of the necessary groundwater samples.
3. Purged groundwater must be collected, containerized, and disposed of properly. Water collected during purging activities must be collected then immediately managed as leachate.
4. Analytical methods to be utilized by the facility must be in accordance with the latest promulgated version of USEPA's "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods" (SW-846).
5. Quality assurance/quality control procedures which meet the general requirements of SW-846 must be implemented during all sampling and analysis efforts. In addition, sample collection, handling, preservation, preparation, and analysis must be conducted in accordance with the procedures set forth in SW-846.

H. STATISTICAL PROCEDURES

When evaluating the monitoring results in accordance with Condition VII-A.E, the Permittee shall use the following procedures:

1. The Permittee shall compare each parameter value from a sampling event to the parameter background values established for that well.
2. The Permittee shall utilize the Average Replicate T-test for all statistical comparisons when a mean and standard deviations are developed.
3. Where the PQL is used for a background value a tolerance range of two (2) times the PQL will be established. If an observed value is above the tolerance range or any two (2) or more parameter values for that well exceed the established PQL, the Permittee shall repeat the procedure within ten (10) days after receiving the laboratory data with a fresh sample from that well. If the observed value from the second sampling again fails any of the comparisons, the Permittee shall conclude that a significant increase has occurred.
4. The Permittee shall review monitoring results from four (4) consecutive sampling events to determine if increasing or decreasing pH trends occur. If four (4) consecutive events of an increasing or decreasing trend is noted, then the Permittee shall collect a confirmation sample for reanalysis from the monitoring well. If the observed value from the second round of sampling again fails the

above-described procedure, then the Permittee shall conclude that a statistically significant change has occurred.

I. REPORTING AND RECORDKEEPING

1. The Permittee shall enter all monitoring, testing, and analytical data obtained in accordance with Conditions VII-A.D, VII-A.E, VII-A.F, VII-A.G and VII-A.H. in the facility's operating record. The data must include all computations, calculated means, variances, t-statistic values and t-statistic results or results of statistical test that the Illinois EPA has determined to be equivalent.
2. Samples collected to meet the requirements of the groundwater monitoring program described in Conditions VII-A.D, VII-A.E, VII-A.F, and VII-A.H shall be collected and reported, as identified in the following table. All additional data collected for the groundwater monitoring program (as specified in Conditions VII-A.D, VII-A.E, VII-A.F, and VII-A.H) shall also be submitted to the Illinois EPA at the address listed in Condition VII-A.C.5 in accordance with this schedule.

<u>Samples to be collected during the months of:</u>	<u>Results submitted to Illinois EPA by the following</u>	<u>Parameters to be monitored:</u>
April - June	July 15	List G1
October - December	January 15	List G1

3. Groundwater surface elevation, measured pursuant to Condition VII-A.F.1, shall be collected semi-annually and submitted to the Illinois EPA in accordance with the schedule in Condition VII-A.I.2.
4. The Permittee shall report the groundwater flow rate and direction in the shallow zone as required by Condition VII-A.E.2 by July 15 each year.
5. The Permittee shall report the surveyed elevation, as required by Condition VII-A.F.2 of the top of the well casing "stick-up," referenced to Ft-MSL in accordance with the following schedule:
 - a. For wells identified in Condition VII-A.C.1, every five (5) years (during the second semi-annual sampling event), or at the request of the Illinois EPA or whenever the elevation changes.
 - b. For any new wells, at the time of installation and reported in the as-built diagrams, subsequent measurements shall be made every five (5) years

(during the second semi-annual sampling event), or whenever the elevation changes.

6. Elevation of the bottom of each monitoring well (Storet No. 72020) identified in Condition VII-A.C.1, as referenced to Ft-MSL, is to be reported at least annually in accordance with Condition VII-A.F.3. This measurement shall be taken during the second semi-annual sampling event each year.
7. Information required by Conditions VII-A.I.2, VII-A.I.3, VII-A.I.5, and VII-A.I.6 must be submitted in an electronic format. The information is to be submitted in accordance with the schedule found in Condition VII-A.I.2. Additional guidance regarding the submittal of the information in an electronic format can be found on the Illinois EPA's website.
8. The Permittee shall submit a completed "RCRA Facility Groundwater, Leachate and Gas Reporting Form" (LPC-592) as a cover sheet for any notices or reports required by the permit for identification purposes. Only one copy of the LPC-592 must accompany the submittal. However, the Permittee must submit one (1) original and (excluding the groundwater and leachate monitoring results submitted in an electronic format) a minimum of two (2) copies of each notice or report submitted to the Illinois EPA. The form is not to be used for permit modification requests.
9. The Permittee shall report all information to the Illinois EPA in a form which can be easily reviewed. All submittals must contain tables of data, drawings, and text, as necessary, to accurately describe the information contained in the submittal.
10. If the Permittee determines, pursuant to Condition VII-A.E.4, that there is statistically significant increase for any of the parameters specified in Condition VII-A.D.1 at any monitoring well in Condition VII-A.C.1 the Permittee shall:
 - a. Notify the Illinois EPA in writing indicating what parameters and wells have shown statistically significant increases and provide all statistical calculations. This notification shall be submitted to the Illinois EPA within seven (7) days of the date that the increases are discovered.
 - b. Sample the groundwater in the affected well(s) listed in Condition VII-A.C.1 and determine the concentration of all constituents identified in 35 Ill. Adm. Code 724, Appendix I, such that the results will accompany the permit modification required by Condition VII-A.I.10.d.
 - c. For any 35 Ill. Adm. Code 724, Appendix I compounds found in the analysis pursuant to this Condition, the Permittee may resample within one (1) month and repeat the analysis for those compounds detected. If results of the second analysis confirm the initial results, then these

constituents will form the basis for compliance monitoring. If the Permittee does not resample for the compounds pursuant to this condition, the hazardous constituents found during the initial 35 Ill. Adm. Code 724, Appendix I analysis will form the basis for compliance monitoring.

- d. Submit to the Illinois EPA a permit modification request to establish a compliance monitoring program meeting the requirements of 35 Ill. Adm. Code 724.199. The application shall be submitted to the Illinois EPA within ninety (90) days of the date that the exceedance is discovered. Furthermore, the application must include the following information:
 - i. An identification of the concentration of any 35 Ill. Adm. Code 724, Appendix I constituents found in the groundwater at each monitoring well;
 - ii. Any proposed changes to the groundwater monitoring system at the facility necessary to meet the requirements 35 Ill. Adm. Code 724.199;
 - iii. Any proposed changes to the monitoring frequency, sampling and analysis procedures, or methods or statistical procedures used at the facility necessary to meet the requirements of 35 Ill. Adm. Code 724.199; and
 - iv. For each hazardous constituent found, a proposed concentration limit under 35 Ill. Adm. Code 724.194(a)(1) or 724.194(a)(2), or a notice of intent to seek an alternate concentration limit for a hazardous constituent under 35 Ill. Adm. Code 724.194(b).
- e. Submit to the Illinois EPA a corrective action feasibility plan to meet the requirements of 35 Ill. Adm. Code 724.200 unless the concentrations of all hazardous constituents identified under Condition VII-A.I.10.b are listed in 35 Ill. Adm. Code 620.410 and their concentrations do not exceed the respective Groundwater Quality Standards or the Permittee has sought alternate concentration limits under Condition VII-A.I.10.d.iv for every hazardous constituent identified under Condition VII-A.I.10.b. This plan must be submitted to the Illinois EPA within 180 days of the date the increase is discovered.
- f. Submit to the Illinois EPA all data necessary to justify any alternate concentration limit for a hazardous constituent sought under Condition VII-A.I.10.d.iv. This plan must be submitted to the Illinois EPA within 180 days of the date the increase is discovered.

11. If the Permittee determines, pursuant to Condition VII-A.E.4, that there is a statistically significant increase above the background values for the parameters specified in Condition VII-A.D.1, the Permittee may demonstrate that a source other than a regulated unit caused the increase or that the increase resulted from error in sampling, analysis, or evaluation. The Permittee shall submit a permit modification request in accordance with Condition VII-A.I.10.d unless the demonstration successfully shows that a source other than the regulated unit caused the increase or that the increase resulted from errors in sampling, analysis or evaluation and the Illinois EPA concurs.

To make this demonstration, the Permittee shall:

- a. Notify the Illinois EPA in writing that they intend to make this demonstration. This notification must be submitted to the Illinois EPA within seven (7) days of the date that the increase is discovered.
- b. Submit a report to the Illinois EPA which demonstrates that a source other than a regulated unit caused the increase, or that the increase resulted from error in sampling, analysis, or evaluation. This report must be submitted within ninety (90) days of the date that the increase is discovered.
- c. Submit to the Illinois EPA a permit modification request to make any appropriate changes to the shallow zone groundwater observation monitoring program in accordance with 35 Ill. Adm. Code 703, Subpart G. This permit modification request must be submitted within ninety (90) days of the date that the increase is discovered.
- d. Continue to monitor in accordance with the shallow zone groundwater observation monitoring program at the facility.

J. REQUEST FOR PERMIT MODIFICATION

1. If the Permittee determines that the shallow zone groundwater observation monitoring program no longer satisfies the requirements of 35 Ill. Adm. Code 724.198, the Permittee must, within ninety (90) days, submit a permit modification request to the Illinois EPA to make any appropriate changes to the program which will satisfy the regulations.
2. Conditions in this section of the permit may be modified in accordance with 35 Ill. Adm. Code 705.128 if there is cause for such modification, as defined in 35 Ill. Adm. Code 702.184. Causes for modification identified in this section include, but are not limited to, alterations to the permitted facility, additional information which would have justified the application of different permit conditions at the time of issuance, and new regulations.

SECTION VIII: STANDARD CONDITIONS

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 (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 reissuance, 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 705.202)
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 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 35 Ill. Adm. Code 721, Appendix A. 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 must retain records of all monitoring information, including all calibration and maintenance records and all original strip chart recordings for continuous monitoring instrumentation, copies of all reports and records required by this permit, and records of all data used to complete the application for this permit for a period of at least three (3) years from the date of the sample, measurement, report or application. These periods may be extended by request of the Illinois EPA at any time. The Permittee must 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 must give written notice to the Illinois EPA as soon as possible of any planned physical alterations or additions to the permitted facility. In general, proposed changes to the facility will need to be submitted to the Illinois EPA as permit modification request that complies with the requirements of 35 Ill. Adm. Code 703.280. (35 Ill. Adm. Codes 702.152(a))
15. **CONSTRUCTION CERTIFICATION.** For a new hazardous waste management (HWM) facility, the Permittee must not commence treatment, storage or disposal of hazardous waste; and for a facility being modified the Permittee must 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 fifteen (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 703.247)
16. **ANTICIPATED NONCOMPLIANCE.** The Permittee must give advanced written notice to the Illinois EPA of any planned changes in the permitted facility or activity which may result in noncompliance with permit requirements, regulations, or the Act. (35 Ill. Adm. Code 702.152(b))
17. **TRANSFER OF PERMITS.** This permit may not be transferred by the Permittee to a new owner or operator unless the permit has been modified or reissued pursuant to 35 Ill. Adm. Code 703.260(b) or 703.272. Changes in the ownership or operational control of a facility must be made as a Class 1 modification with the prior written approval of the Illinois EPA. The new owner or operator shall submit a revised permit application no later than ninety (90) days prior to the scheduled change. (35 Ill. Adm. Code 703.260)
18. **MONITORING REPORTS.** Monitoring results must be reported at the intervals specified in the permit. (35 Ill. Adm. Code 702.152(d))
19. **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))
20. **TWENTY-FOUR HOUR REPORTING.**
- a. The Permittee must 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 twenty-four (24) hours from the time the Permittee becomes aware of the following circumstances. This report must 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 must 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 must also be provided within five (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 (5) day written notice requirement in favor of a written report within fifteen (15) days. (35 Ill. Adm. Code 702.152(f) and 703.245(b))
- 21. **OTHER NONCOMPLIANCE.** The Permittee must report all instances of noncompliance not otherwise required to be reported under Conditions VIII.14, VIII.15 and VIII.16, at the time monitoring reports, as required by this permit, are submitted. The reports must contain the information listed in Condition VIII.20. (35 Ill. Adm. Code 702.152(g))
- 22. **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 must promptly submit such facts or information. (35 Ill. Adm. Code 702.152(h))

23. **REPORTING REQUIREMENTS.** The following reports required by 35 Ill. Adm. Code Part 724 must 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 fifteen (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 fifteen (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)
24. **SUBMITTAL OF REPORTS OR OTHER INFORMATION.** All written reports or other written information required to be submitted by the terms of this permit must be sent to:
- Illinois Environmental Protection Agency
Bureau of Land #33
Permit Section
1021 North Grand Avenue East
Post Office Box 19276
Springfield, Illinois 62794-9276
25. **SIGNATORY REQUIREMENT.** All permit applications, reports or information submitted to the Illinois EPA must be signed and certified as required by 35 Ill. Adm. Code 702.126. (35 Ill. Adm. Code 702.151)
26. **CONFIDENTIAL INFORMATION.** Any claim of confidentiality must be asserted in accordance with 35 Ill. Adm. Code 702.103 and 35 Ill. Adm. Code Part 161.
27. **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.
28. **WASTE MINIMIZATION.** The Permittee must certify at least annually that the Permittee has a program in place to reduce the volume and toxicity of hazardous waste that he generates to the degree determined by the Permittee to be economically practicable, and the proposed method of treatment, storage, or disposal is that practicable method currently available to the Permittee which minimizes the present and future threat to human health and the environment, in accordance with 35 Ill. Adm. Code 724.173(b)(9).

GENERAL FACILITY STANDARDS

29. **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 (4) weeks in advance of the date the waste is expected at the facility. (35 Ill. Adm. Code 724.112(a))
30. **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))
31. **GENERAL WASTE ANALYSIS.** The Permittee must comply with the procedures described in the approved waste analysis plan. (35 Ill. Adm. Code 724.113)
32. **SECURITY.** The Permittee must comply with the security provisions of 35 Ill. Adm. Code 724.114(b) and (c).
33. **GENERAL INSPECTION REQUIREMENTS.** The Permittee must follow the approved inspection schedule. The Permittee must remedy any deterioration or malfunction discovered by an inspection as required by 35 Ill. Adm. Code 724.115(c). Records of inspections must be kept as required by 35 Ill. Adm. Code 724.115(d).
34. **PERSONNEL TRAINING.** The Permittee must conduct personnel training as required by 35 Ill. Adm. Code 724.116 and must maintain training documents and records as required by 35 Ill. Adm. Code 724.116(d) and (e).

35. **GENERAL REQUIREMENTS FOR IGNITABLE, REACTIVE, OR INCOMPATIBLE WASTE.** The Permittee must comply with the requirements of 35 Ill. Adm. Code 724.117.
36. **CLOSURE REQUIREMENTS FOR ACCUMULATION AREAS.** The Permittee shall close container storage areas, tanks, drip pads, or containment buildings used for the accumulation of on-site generated hazardous waste in accordance with the requirements identified in 35 Ill. Adm. Code 722.117(a)(8). This requirement is applicable to storage areas used on or after this section was amended at 44 Ill. Reg. 15263, effective September 3, 2020.

PREPAREDNESS AND PREVENTION

37. **DESIGN AND OPERATION OF FACILITY.** The Permittee must 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)
38. **REQUIRED EQUIPMENT.** The Permittee must equip the facility with the equipment set forth in the approved contingency plan, as required by 35 Ill. Adm. Code 724.132.
39. **TESTING AND MAINTENANCE OF EQUIPMENT.** The Permittee must test and maintain the equipment specified in the contingency plan and this permit 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)
40. **ACCESS TO COMMUNICATIONS OR ALARM SYSTEM.** The Permittee must maintain access to the communications or alarm system as required by 35 Ill. Adm. Code 724.134.
41. **REQUIRED AISLE SPACE.** The Permittee must maintain aisle space as required by 35 Ill. Adm. Code 724.135 and National Fire Protection Association (NFPA) requirements.
42. **ARRANGEMENTS WITH STATE AND LOCAL AUTHORITIES AND EMERGENCY RESPONSE CONTRACTORS.** The Permittee must 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.

CONTINGENCY PLAN

43. **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 hazardous waste constituents which could 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) (35 Ill. Adm. Code 703.241). Within fifteen (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).

44. **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.
45. **AMENDMENTS TO PLAN.** The Permittee must review and immediately amend, if necessary, the contingency plan, as required by 35 Ill. Adm. Code 724.154.
46. **EMERGENCY COORDINATOR.** A trained emergency coordinator must be available at all times in case of an emergency as required by 35 Ill. Adm. Code 724.155 and 724.156.

MANIFEST SYSTEM RECORD KEEPING AND REPORTING

47. **MANIFEST SYSTEM.** The Permittee must comply with the manifest requirements of 35 Ill. Adm. Code 724.171, 724.172 and 724.176.
48. **OPERATING RECORD.** The Permittee must maintain a written operating record at the facility in accordance with 35 Ill. Adm. Code 724.173.
49. **ANNUAL REPORT.** The Permittee must 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

50. **PERFORMANCE STANDARD.** The Permittee must close the facility as required by 35 Ill. Adm. Code 724.211 and in accordance with the approved closure plan.
51. **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 facility operation plans or facility design affects the closure plan pursuant to 35 Ill. Adm. Code 724.212(c).
52. **NOTIFICATION OF CLOSURE.** The Permittee must notify the Illinois EPA at least forty-five (45) days prior to the date it expects to begin closure. (35 Ill. Adm. Code 724.212(d))
53. **TIME ALLOWED FOR CLOSURE.** After receiving the final volume of hazardous waste, the Permittee must 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)

54. DISPOSAL AND/OR DECONTAMINATION OF EQUIPMENT. When closure is completed, the Permittee must decontaminate and/or dispose of all facility equipment and structures as required by the approved closure plan. (35 Ill. Adm. Code 724.214)
55. CERTIFICATION OF CLOSURE. When closure is completed, the Permittee must 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 plan.
56. 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 sixty (60) days prior to the anniversary date of the establishment of the financial instrument(s) used to comply with Section 724.243. However, if the owner/operator is using the financial test or corporate guarantee, it must be updated for inflation within thirty (30) days after close of the firm's fiscal year, and before the submission of updated information to the Illinois EPA as specified in Section 724.243(f).
 - b. Revised no later than thirty (30) days after the Illinois EPA has approved a request to modify the closure plan, if the change in the closure plan increases the cost of closure.
 - c. Kept on record at the facility and updated. (35 Ill. Adm. Code 724.242)
 - d. Made immediately available to Illinois EPA personnel upon Illinois EPA request.
57. FINANCIAL ASSURANCE FOR FACILITY CLOSURE. The Permittee must 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 Condition VIII.55. Changes in financial assurance mechanisms must be approved by the Illinois EPA pursuant to 35 Ill. Adm. Code 724.243.

Financial assurance documents submitted to Illinois EPA should be directed to the following address:

Illinois Environmental Protection Agency
Bureau of Land #24
Financial Assurance Program
1021 North Grand Avenue East
P.O. Box 19276
Springfield, IL 62794-9276

58. **LIABILITY REQUIREMENTS.** The Permittee must demonstrate continuous compliance with the requirements of 35 Ill. Adm. Code 724.247 and the documentation requirements of 35 Ill. Adm. Code 724.251.
59. **INCAPACITY OF OWNERS OR OPERATORS, GUARANTORS, OR FINANCIAL INSTITUTIONS.** The Permittee shall comply with 35 Ill. Adm. Code 724.248 whenever necessary.

LAND DISPOSAL RESTRICTIONS

60. **DISPOSAL PROHIBITION.** Any waste identified in 35 Ill. Adm. Code 728, Subpart C, or any mixture of such a waste with nonrestricted wastes, is prohibited from land disposal unless it meets the standards of 35 Ill. Adm. Code 728, Subpart D, or unless it meets the requirements for exemptions under 35 Ill. Adm. Code 728, Subpart C. "Land disposal" means placement in or on the land and includes, but is not limited to, placement in a landfill, surface impoundment, waste pile, injection well, land treatment facility, or vault intended for disposal.
61. **DILUTION PROHIBITION.** The Permittee must not in any way dilute a restricted waste or residual from treatment of a restricted waste as a substitute for adequate treatment in order to achieve compliance with 35 Ill. Adm. Code 728, Subpart D (35 Ill. Adm. Code 728.103).
62. **WASTE ANALYSIS.**
- a. The Permittee must test his waste or extract developed, using the test method identified in Title 40 Code of Federal Regulations (40 CFR) 268, Appendix I, or use knowledge of the waste, to determine if the waste is restricted from land disposal.
 - b. For any waste with treatment standards expressed as concentrations in the waste extract, the Permittee must test the treatment residues, or an extract of such residues developed using the test method described in 40 CFR 268, Appendix I, to assure that the treatment residues or extract meet the applicable treatment standard.
 - c. If the treatment residues do not meet the treatment standards, or if the Permittee ships any restricted wastes to a different facility, the Permittee must comply with the requirements applicable to generators in 35 Ill. Adm. Code 728.107 and 728.150(a)(1).
63. **STORAGE RESTRICTIONS**
- a. The Permittee must not store hazardous wastes restricted from land disposal under 35 Ill. Adm. Code Part 728, Subpart C unless such wastes are stored only in

containers or tanks, and are stored solely for the purpose of the accumulation of such quantities as is necessary to facilitate proper recovery, treatment, or disposal, and: (1) each container is clearly marked to identify its contents and the date each period of accumulation begins; (2) each tank is clearly marked to identify its contents, the quantity of each hazardous waste received, and the date each period of accumulation begins, as required by 35 Ill. Adm. Code 728.150.

- b. The Permittee must comply with the operating record requirements of 35 Ill. Adm. Code 724.173.

64. NEW DETERMINATIONS OF PROHIBITED WASTES

Wastes which are prohibited from land disposal under 35 Ill. Adm. Code 728, Subpart C, or for which treatment standards have been established under 35 Ill. Adm. Code 728, Subpart D, subsequent to the date of issuance of this permit, shall be subject to Conditions VIII.60 through VIII.63.

POST-CLOSURE

65. CARE AND USE OF PROPERTY. The Permittee shall provide post-closure care for the facility as required by 35 IAC 724.217 and in accordance with the approved post-closure plan.
66. AMENDMENT TO POST-CLOSURE PLAN. The Permittee must amend the post-closure plan whenever a change in the facility operation plans or facility design affects the post-closure plan or when an unexpected event has occurred which has affected the post-closure plan pursuant to 35 IAC 724.218(d).
67. COST ESTIMATE FOR POST-CLOSURE. The Permittee's original post-closure cost estimate, prepared in accordance with 35 IAC 724.244, must be:
 - a. Adjusted for inflation either 60 days prior to each anniversary of the date on which the first post-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. This permit condition is applicable throughout the entirety of the post-closure care period.
 - b. Revised whenever there is a change in the facility's post-closure plan increasing the cost of the post-closure plan.
 - c. Kept on record at the facility and updated. (35 IAC 724.244).
- a. Maintained at the value approved by Illinois EPA with annual adjustment for inflation during the post-closure care period and cannot be decreased unless approved by the Illinois EPA in a permit modification.

68. **FINANCIAL ASSURANCE FOR POST-CLOSURE CARE.** The Permittee shall demonstrate compliance with 35 IAC 724.245 and 703.241(a)(2) by providing documentation of financial assurance, as required by 35 IAC 724.251, in at least the amount of the cost estimates required by the Permit Condition 67. This financial assurance shall be maintained at such value throughout the post-closure care period and shall be adjusted accordingly pursuant to Permit Condition 67. Changes in financial assurance mechanisms must be approved by the Illinois EPA pursuant to 35 IAC 724.245.

Financial assurance documents submitted to Illinois EPA should be directed to the following address:

Illinois Environmental Protection Illinois EPA
Bureau of Land #24
Financial Assurance Program
1021 North Grand Avenue East
P.O. Box 19276
Springfield, IL 62794-9276

69. **INCAPACITY OF OWNERS OR OPERATORS, GUARANTORS, OR FINANCIAL INSTITUTIONS.** The Permittee shall comply with 35 IAC 724.248 whenever necessary.

SECTION IX: 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.

Condition	Submittal	Due Date
Section II: CONTAINERS		
H.1	Notify Illinois EPA of intention to close the container storage area	45 days prior to the date closure is expected to begin
H.1	Submit sampling and analysis plan for review	45 days prior to the date closure is expected to begin
H.4	Submit application for modification of permit and post-closure care plan	Within 30 days after determination that the container storage area cannot be clean closed
H.5	Submit financial assurance to include modification required in Condition II.H.4	Within 30 days after permit is modified
H.6	Submit certification for closure of container storage area	Within 60 days after closure is completed
SECTION III: TANK SYSTEMS		
F.3.g	Results of tank integrity assessment	Within 60 days after inspection
G.1	Report to Illinois EPA Peoria FOS of any leak or spill of 1 pound or greater.	Within 24-hours of leak or spill
G.2	Report to Illinois EPA on release and Permittee's response	Within 30 days after leak or spill occurs
G.3	Certification of major repairs	Within 7 days from returning tank system to service
H.1	Notify Illinois EPA of intent to close	45 days prior to the date closure is expected to begin
H.1	Submit sampling and analysis plan	45 days prior to the date closure is expected to begin
H.4	Submit application for modification of permit and post-closure care plan	Within 30 days after determination that the tank system cannot be clean closed
H.5	Submit financial assurance to include modification required in Condition III.H.4	Within 30 days after permit is modified
H.6	Submit certification for closure of tank system	Within 60 days after closure is completed

Condition	Submittal	Due Date
J.1	Submit certification of construction to Illinois EPA	Within 30 days after completion of any new tank system construction
SECTION IV: CONTAINMENT BUILDING		
F.1	Notify Illinois EPA of intent to close the containment building	45 days prior to the date closure is expected to begin
F.1	Submit sampling and analysis plan	45 days prior to the date closure is expected to begin
F.4	Submit application for modification of permit and post-closure care plan	Within 30 days of determination containment building cannot be clean closed
F.5	Submit financial assurance to include modification required in Condition IV.F.4	Within 30 days after permit is modified
F.6	Submit certification for closure of containment building	Within 60 days after closure is completed
G.1.d	Notify Illinois EPA of release	Within 7 days after discovery
G.3	Certification of repairs	In accordance with the schedule submitted
SECTION V: SURFACE IMPOUNMENTS		
D.1	Notify Illinois EPA of leak in dike or sudden drop in liquid level	Within 7 days after detection
E.2	Submit a P.E. certification of dike's structural integrity	Prior to resuming service to an impoundment which has been removed from service for more than 6 months
H.1	Notify Illinois EPA of intent to close the surface impoundment	60 days prior to the date closure is expected to begin
H.1	Submit sampling and analysis plan	60 days prior to the date closure is expected to begin
H.5	Submit application for modification of permit and post-closure care plan	Within 30 days of determination surface impoundment cannot be clean closed
H.6	Submit financial assurance to include modification required in Condition V.H.5	Within 30 days after permit is modified
H.7	Submit certification of closure of surface impoundment	Within 60 days after closure is completed
SECTION VI: POST-CLOSURE		
F.2	Request permit modification to remove the hazardous waste, liner, or contaminated soil	Prior to removing the liner or wastes

Condition	Submittal	Due Date
F.3	Submit proposed Environmental Covenant	One year prior to end of post-closure care period
F.4	Certification of completion of post-closure and Post-Closure Documentation Report	60 days after completion of post-closure care
SECTION VII: GROUNDWATER DETECTION MONITORING PROGRAM		
I.2	Groundwater monitoring data and statistical calculations required semi-annually. Samples Collected During: April- June October-December	Due July 15 (List G1 & G2) Due January 15 (List G1)
I.3	Groundwater surface elevation	Semi-annually
I.4	Groundwater flow rate and direction	Annually due July 15
I.5	Surveyed elevations	Every 5 years or at the request of Illinois EPA
I.6	Elevation of the bottom of each well	Annually due July 15
I.10.a	Notify Illinois EPA in writing of statistically significant increase	Within 7 days the increase was discovered
I.10.b	Sample groundwater in all wells for Appendix I constituents	Immediately after increase is discovered
I.10.d	Apply for permit modification establishing compliance monitoring program	Within 90 days the increase was discovered
I.10.e	Provide Illinois EPA with corrective action feasibility plan	Within 180 days the increase was discovered
I.11.a	Notify Illinois EPA in writing of intent to make demonstration	Within 7 days the increase was discovered
I.11.b	Submit a report to Illinois EPA which demonstrates that a source other than a regulated unit caused the increase, or resulted from error	Within 90 days the increase was discovered
I.11.c	Submit to Illinois EPA application to change detection monitoring program	Within 90 days the increase was discovered
SECTION VII-A: SHALLOW ZONE GROUNDWATER OBSERVATION MONITORING PROGRAM		
I.2	Groundwater monitoring data and statistical calculations required semi-annually. Samples Collected During: April- June October-December	Due July 15 Due January 15
I.3	Groundwater surface elevation	Semi-annually
I.4	Groundwater flow rate and direction	Annually due July 15
I.5	Surveyed elevation	Every 5 years or at the request of Illinois EPA or whenever the elevation

Condition	Submittal	Due Date
I.5 (cont.)		changes. In addition, for new wells, at the time of installation and then every 5 years or whenever the elevation changes
I.6	Elevation of the bottom of each well	Annually due July 15
I.10.a	Notify Illinois EPA in writing of statistically significant increase	Within 7 days the increase was discovered
I.10.b	Sample groundwater in all wells for Appendix I constituents	Immediately after increase is discovered
I.10.d	Apply for permit modification establishing compliance monitoring program	Within 90 days the increase was discovered
I.10.e	Provide Illinois EPA with corrective action feasibility plan	Within 180 days the increase was discovered
I.11.a	Notify Illinois EPA in writing of intent to make demonstration	Within 7 days the increase was discovered
I.11.b	Submit a report to Illinois EPA which demonstrates that a source other than a regulated unit caused the increase, or resulted from error	Within 90 days the increase was discovered
I.11.c	Submit to Illinois EPA application to change detection monitoring program	Within 90 days the increase was discovered
SECTION VIII: STANDARD CONDITIONS		
6	Complete application for a new permit	180 days prior to permit expiration
11	Provide information requested by Illinois EPA and copies of records required to be kept by this permit	Within a reasonable time
14	Notify Illinois EPA of planned physical alterations or additions	As soon as possible
16	Notify Illinois EPA of changes which may result in permit noncompliance	As soon as possible
17	Application for permit modification indicating permit is to be transferred	At least 90 days prior to transfer date
19	Submission of any information required in a compliance schedule	14 days after each schedule date
20	Report to the Illinois EPA any non-compliance which may endanger health or environment:	
	By telephone	24 hours after discovery, and
	In writing	5 days after discovery
21	Report all other instances of non-compliance	March 1 of each year along with Annual Report

Condition	Submittal	Due Date
29	Notify Illinois EPA in writing of expected receipt of hazardous waste from foreign source	At least 4 weeks prior to receipt of waste
43	Implementation of contingency plan:	As needed
	Notify appropriate State and local agencies with designated response roles	
	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 EMA (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, that facility is in compliance with 35 Ill. Adm. Code 724.156(h)	Prior to resuming operation in affected areas
	Report to Illinois EPA details regarding incident which required implementation of contingency plan	Within 15 days after event
49	Submit annual report required by 35 Ill. Adm. Code 724.175	March 1st of each year
51	Application for permit modification amending closure plan	60 days prior to proposed change, or no later than 60 days after unexpected event has occurred
52	Notify Illinois EPA date expect to begin closure	45 days prior to date expect closure to begin
53	Submit closure certification	Within 60 days after completion of closure
56(a) and 67(a)	Adjust closure cost estimate for inflation	Within 60 days prior to anniversary date or 30 days after the close of the facility's fiscal year
56(b) and 67(b)	Revision of closure cost estimate	30 days after Illinois EPA approval
57 and 69	Change in financial assurance mechanism for closure	As required by 35 Ill. Adm. Code 724.243
58	Change in coverage for sudden and non-sudden accidental occurrences	As required by 35 Ill. Adm. Code 724.247

Condition	Submittal	Due Date
59	Notify Illinois EPA of commencement of voluntary or involuntary bankruptcy proceedings	Within 10 days after commencement of proceeding
SECTION X: SPECIAL CONDITIONS		
A.1	Current 39i certification and supporting documents	With all applications for a permit
B.1	Submit revised cost estimate for post-closure and corrective action costs	Within 60 days of effective date of permit
SECTION XI: CORRECTIVE ACTION FOR SWMUs		
D.1	Notify Illinois EPA of newly identified SWMU(s)/AOC(s)	Within 30 days of discovery
D.3	SWMU Assessment Plan	Within 90 days after receipt of Illinois EPA's request
E.	Notify Illinois EPA of release from SWMU	Within 30 days of discovery
F.3	Submit financial assurance for corrective action cost estimate	Within 60 days after cost estimate is approved

SECTION X: SPECIAL CONDITIONS

A. Prior Conduct

1. The Permittee shall submit current 39(i) certifications and supporting documentation with all applications for a permit.

B. Compliance Schedule

1. Cost Estimates: Within sixty (60) days of the effective date of this Permit,
 - a. The Permittee shall submit a revised post-closure cost estimate to meet the required minimum of thirty (30) years post-closure care costs for the closed landfill, as a Class 1* permit modification. The Permittee must submit financial assurance for the post-closure cost estimate within sixty (60) days of Illinois EPA's approval of the cost estimate.
 - b. The Permittee shall include a corrective action cost estimate for inspection and maintenance of the closed Pre-RCRA Landfill. The Permittee must submit financial assurance for corrective action cost within sixty (60) days of Illinois EPA's approval of the cost estimate.
 - c. All cost estimates must be updated to the current year.
2. Detailed Closure Plan for the Waste Stabilization Facility (WSF): Within sixty (60) days of the effective date of this Permit, the Permittee must submit a detailed closure plan for the WSF, including all units listed in Condition IV.B.2, as a Class 1* permit modification. The Permittee shall use the Illinois EPA's Guidance for Preparing RCRA Closure Plans, which can be found on the Illinois EPA's website.
3. Point of Compliance: Within ninety (90) days of the effective date of this Permit submit a request to revise groundwater designations in Condition VII.C.1 to add a sufficient number of point of compliance wells, as a Class 1* permit modification. The request must reevaluate the point of compliance for the Groundwater Detection Monitoring Program to meet the minimum requirements of 35 Ill. Adm. Code 724.195 and 724.197(a) to adequately allow for the detection of contamination when hazardous waste or hazardous constituents have migrated from the hazardous waste management area to the uppermost aquifer.

SECTION XI: CORRECTIVE ACTION FOR SOLID WASTE MANAGEMENT UNITS**A. INTRODUCTION**

1. In accordance with Section 3004(u) of RCRA and 35 Ill. Adm. Code 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, listed in 35 Ill. Adm. Code 721, Appendix H from any solid waste management unit (SWMU) at its facility near Peoria, Illinois.
2. The original USEPA RCRA permit, effective November 4, 1987, contained, among other things, corrective action requirements for one (1) SWMU, a unit referred to as the "pre-RCRA closed landfill". In addition, the Permittee has evaluated two other areas of concern as part of its corrective action responsibilities during the term of the permit. A summary of the corrective action activities completed under the initial RCRA permit overseen by USEPA is provided in Attachment G to this permit.
3. Illinois EPA has authority for imposing corrective action requirements at RCRA permitted facilities and thus will now be responsible for overseeing future corrective action activities at this facility.
4. The Permittee has adequately addressed its corrective action responsibilities for the areas evaluated during the original RCRA permit. However, this permit requires the Permittee continue to provide post-closure care of the final cover at the closed pre-RCRA Landfill using the same procedures established for the closed landfill portions of this facility receiving post-closure care in accordance with Section VI.
5. The Permittee must provide corrective action, as appropriate, for any future releases from SWMUs, new SWMUs, or any Area(s) of Concern (AOCs) identified under Condition XI.D at the facility.
6. The requirements of 35 Ill. Adm. Code Part 742 must be met in determining remediation objectives for all corrective action activities.
7. The Permittee shall incorporate, as necessary, climate adaptation considerations into the corrective action required at this facility in accordance with the applicable USEPA guidance(s) regarding climate change under RCRA corrective action.

B. CONTINUED CORRECTIVE ACTION REQUIREMENTS

1. The Permittee shall conduct post-closure inspections of the final cover system of the closed Pre-RCRA Landfill in accordance with the requirements set forth in Condition VI.D.
4. The Permittee must provide adequate maintenance of the final cover system of the

closed Pre-RCRA Landfill in accordance with the requirements set forth in Condition VI.D.

4. Prior to a request for a no further action (NFA) for the closed Pre-RCRA Landfill, the Permittee must make a demonstration similar to the requirements described in Condition VI.F.3 for the hazardous waste landfill under post-closure care. Such demonstration must include a proposed environmental covenant (EC) and long-term management plan for the closed Pre-RCRA Landfill in order to demonstrate completion of RCRA corrective action.

C. INTERIM MEASURES

At any time during the course of this permit, the Permittee may initiate interim measures for the purpose of preventing continuing releases and/or mitigating the results of releases and/or mitigating the migration of hazardous wastes or hazardous constituents. It shall not be necessary to conduct all phases of an investigation prior to implementing an interim measure if the Illinois EPA and the Permittee agree that a problem can be corrected, or a release cleaned up, without additional study and/or without a formal corrective measures study (CMS).

1. Prior to implementing any interim measures, the Permittee must submit detailed information regarding the proposed interim measure to the Illinois EPA for approval. This information shall include, at a minimum:
 - a. The objectives of the interim measures: how the measure is mitigating a potential threat to human health and the environment and/or is consistent with and integrated into any long-term solution at the facility;
 - b. The design, construction, and maintenance requirements;
 - c. A schedule for design and construction; and
 - d. A schedule for progress reports.
2. If the Illinois EPA determines that a release cannot be addressed without additional study and/or a formal CMS, then the Illinois EPA will notify the Permittee that these must be performed. Any proposal made under this provision or any other activity resulting from such proposal shall not affect the schedule for implementation of any other portion of the permit.
3. If the Illinois EPA determines that interim measures are necessary to protect human health or the environment, the Permittee will be notified by way of a permit modification.

D. REQUIREMENTS FOR ADDRESSING NEWLY IDENTIFIED SWMU(s) AND AOC(s)

1. The Permittee shall notify the Illinois EPA in writing of any newly identified SWMU or area of concern (AOC) discovered during the course of groundwater monitoring, field investigations, environmental audits, or other means, no later than thirty (30) days after discovery. The notification shall provide the following information, as available:
 - a. The location of the newly identified SWMU or AOC in relation to other SWMUs or AOCs 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. The specifics on all materials, including but not limited to, wastes and hazardous constituents, that have been or are being managed at the SWMU or AOC, to the extent available; and
 - 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.
2. If the submitted information demonstrates a potential for a release of hazardous waste or hazardous waste constituents from the newly identified SWMU/AOC, the Illinois EPA may request in writing, that the Permittee prepare a SWMU Assessment Plan and a proposed schedule of implementation and completion of the Plan for any additional SWMU(s)/AOC(s). This SWMU Assessment Plan must propose investigations, including field investigations, if necessary, to determine the release potential to specific environmental media for the newly identified SWMU/AOC. The SWMU Assessment Plan must demonstrate that the sampling and analysis program, if applicable, can yield representative samples and must include parameters sufficient to identify migration of hazardous waste and hazardous constituents from the newly identified SWMU(s)/AOC(s) to the environment.
3. Within ninety (90) days after receipt of the Illinois EPA's request for a SWMU Assessment Plan, the Permittee shall submit a SWMU Assessment Plan.
4. After the Permittee submits the SWMU Assessment Plan, the Illinois EPA shall either approve, approve with conditions, or disapprove the Plan in writing. If the Plan is approved, or approved with conditions, the Permittee shall begin to implement the Plan within forty-five (45) days of receiving such written notification. If the Plan is

disapproved, the Illinois EPA shall notify the Permittee in writing of the Plan's deficiencies and 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 Illinois EPA 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. Additional investigation plans and reports must be submitted to and approved by the Illinois EPA, as necessary, to ensure the nature and extent of contamination at the SWMU/AOC is adequately characterized. Once the contamination is characterized, the Permittee must develop remedial objectives for the SWMU/AOC in accordance with 35 Ill. Adm. Code Part 742; such objectives are subject to Illinois EPA review and approval.
7. The Permittee must implement a Corrective Measures Program, as necessary, to properly address any contamination encountered during the assessment which exceeds the approved remediation objectives for the SWMU/AOC. It must also be necessary to implement a Corrective Measures Program to support the approved remediation objectives (such as the establishment of any required engineered barriers or institutional controls).
8. All efforts carried out at a newly identified SWMU(s)/AOC(s) must meet the requirements of 35 Ill. Adm. Code 724.201.

E. FUTURE RELEASES FROM SWMUs

There exists a potential that a release may occur in the future from SWMUs identified in the RCRA Facility Assessment (RFA) or RCRA Facility Investigation (RFI) which did not require any corrective action at the time that the RFA or RFI was completed. If the Permittee discovers that a release has occurred from such a SWMU in the future, then the Illinois EPA must be notified of this release within thirty (30) days after its discovery. This notice must contain the information identified in Condition XI.D.1. Upon the Illinois EPA's written request, the Permittee shall determine the nature and extent of the contamination by following the procedures set forth in Condition XI.D.2. All Illinois EPA action on such future releases shall be subject to the appeal provisions of Sections 39(a) and 40(a) of the Illinois Environmental Protection Act.

F. FINANCIAL ASSURANCE

35 Ill. Adm. Code 724.201 requires that financial assurance be established for completing required corrective action at SWMUs:

1. Within thirty (30) days of the Illinois EPA's approval of a corrective action investigation plan or remediation workplan, the Permittee shall submit to Illinois EPA

for review and approval a cost estimate for conducting the corrective action required. Within sixty (60) days after these cost estimates are approved, the Permittee shall meet the requirements of 35 Ill. Adm. Code 724.201 and provide financial assurance to Illinois EPA in amount of the approved cost estimate.

2. The Permittee shall demonstrate compliance with the financial assurance requirements of 35 Ill. Adm. Code 724.201 by providing documentation of financial assurance using a mechanism specified in 35 Ill. Adm. Code 724.243, in at least the amount of the approved corrective action cost estimate. The words "completion of corrective action" shall be substituted for "closure and/or post-closure", as appropriate in the financial instrument specified in 35 Ill. Adm. Code 724.251. The Illinois EPA may accept financial assurance for completion of corrective action in combination with another financial mechanism that is acceptable under 35 Ill. Adm. Code 724.246 at its discretion.
3. The financial assurance requirements of 35 Ill. Adm. Code 724.201 must also be met for any investigative or corrective action efforts carried out in accordance with Section XI.D or Section XI.E. Detailed cost estimates must be developed for any activities carried out under this Section and must accompany any workplan/report submitted to Illinois EPA for review and approval. Appropriate documentation of financial assurance in at least the amount of the approved cost estimate must be submitted to Illinois EPA within sixty (60) days after the cost estimates are approved.
4. Financial assurance for corrective action must be updated, as necessary, to reflect the current status of the RCRA corrective action program at this facility.
5. Within sixty (60) days of the effective date of this permit, the Permittee must establish adequate financial assurance for post-closure care and maintenance of the final cover system over the closed Pre-RCRA Landfill. This post-closure care effort must continue throughout the entire post-closure care period required for the areas of the site subject to Section VI (Post-Closure).

ATTACHMENT A
GENERAL INSPECTION SCHEDULE
1438120003 – Peoria County
Peoria Disposal Company
ILD000805812

GENERAL INSPECTION SCHEDULE

EQUIPMENT	INSPECTION ELEMENT	INSPECTION FREQUENCY
Groundwater monitoring wells	Check for damage, destruction by heavy equipment	Weekly or after storms
Leachate detection systems	Check for damage, proper operation Check for presence of liquids	Weekly or after storms
Safety and Emergency Equipment (Refer to Section G Contingency Plan, for numbers, locations, and capabilities.)		
Personnel Protective/First Aid		
Respirator cartridges	Accessibility, adequate supply, deterioration/damage, tightness of connections	Weekly
5-minute emergency escape units	Accessibility, adequate supply, deterioration/damage, proper operation	Weekly
30-minute emergency escape unit	Accessibility, adequate supply, deterioration/damage, proper operation	Weekly
Compressed air cylinders	Adequate supply, deterioration/damage, proper operation	Weekly
First aid kits	Accessibility, adequate supply	Weekly
Fire blankets	Accessibility, adequate supply, deterioration/damage	Weekly
Emergency showers	Accessibility, adequate supply, deterioration/damage	Weekly
Portable emergency eyewash	Accessibility, adequate supply, deterioration/damage	Weekly
Fire Control		
5-lb. dry chemical fire extinguishers	Determine if extinguishers are in proper location	Weekly
10-lb. dry chemical fire Extinguishers	Determine if extinguisher has been used	Weekly
20-lb. dry chemical fire extinguishers	See page 6 for inspection	Monthly/Weekly
25-lb. dry chemical fire extinguishers	See page 6 for inspection	Monthly/Weekly
25-lb. CO2 fire extinguishers	See page 6 for inspection	Monthly/Weekly
Spill Control/Cleanup		
540 gpm centrifugal pumps	Accessibility, deterioration/damage, proper operation	Weekly
300-foot hose	Accessibility, deterioration/ damage	Weekly
10 pkg. sorbant booms	Accessibility, adequate supply deterioration/damage	Weekly
10 pkg. sorbant pads	Accessibility, adequate supply, deterioration/damage	Weekly
Earthmoving equipment(crawler dozers, rubber-tired scrapers, hydraulic backhoe)	Deterioration/damage, proper Operation	As per maintenance inspection schedule for each equipment item
2000-gal. water truck with pressure pump, hose, nozzles	Deterioration/damage, proper operation	

EQUIPMENT	INSPECTION ELEMENT	INSPECTION FREQUENCY
Pressure washers	Deterioration/damage, proper operation	
Emergency Communication/Alarms		
Telephones	Accessibility, deterioration proper operation	Daily
Private band radio	Accessibility, adequate supply, deterioration/damage, proper operation	Daily
Alarm System	Accessibility, deterioration/damage, proper operation	Daily
Security Devices		
Fence and gates	Inspect entire perimeter for breaches, corrosion	Daily.
	Ensure gates open and close freely.	Daily or when in use
	Check for proper gate lock function	Daily or when in use
Warning signs	Check for visibility, legibility	Weekly
Detex clocks and key stations	Guard check for proper operation	Hourly during guard shifts
Operation and Structural Equipment - Surface Impoundments		
Liner inspection during construction and installation	(See Section F-2b(2))	Upon opening each impoundment
Capacity	Ensure that 2' freeboard is maintained	Daily
Leak Detection System	Check for leakage in collection sump	Daily
	Leakage pumps, transmittal line and electrical to ensure proper functioning	Weekly
Earthen Structures (Liner Foundation, Berms and Dikes)	Check for deterioration malfunctions, erosion, and settlement	Weekly
Liner	Check for liner slippage, tears and leaks	Weekly
Cover and liner inspection during construction and installation	(See Section F-2b(2))	Upon opening and closing each landfill cell
Run-on and runoff control systems	Check for deterioration malfunctions or improper operation, i.e., erosion settlement, obstructions	Weekly and after storms
Wind dispersal control systems	Check for proper functioning, i.e., need for additional dampening with water truck	Weekly and after storms
Leachate collection	Visual inspection of leachate level in storage unit	Weekly and afterstorms
	Visual inspection of leachate lines in manholes	Weekly and after storms
	Leachate pumps, transmittal lines and electrical to ensure proper functioning	Weekly and after storms
	Manhole structure for deterioration and leveling	Weekly and after storms
	Check for exposed leachate collection lines on floor	Weekly and after storms
	Check for wet areas on floor of cell	Weekly and after storms

EQUIPMENT	INSPECTION ELEMENT	INSPECTION FREQUENCY
Tanks T-1 to T-4	Check overfilling equipment	Daily
	Check data from monitoring equipment	Daily
	Check corrosion, erosion and leaks	Weekly
	Check immediate area for obvious signs of leakage	Weekly
	Inspection of the inside of the tanks by emptying and entering	Annual
Containers	Identify proper labeling	Daily
	Check for leaks	Daily
	Check for deterioration	Daily
	Check for proper aisle space	Daily
	Check all items above when container is not in use	Weekly
Container staging/storage area	Check for cracks, spilling and gaps in base, concrete slab	Weekly
	Check for deterioration or damage to sealant from spill or traffic	Weekly
	Check for leakage from the roll-offs	Weekly
	Check that drums are covered	Weekly
	Check for proper placement	Weekly
	Check for adequacy of aisle space	Weekly
Solids Storage Building (tanks)		
Outside Storage Silos		
Unloading/loading area	Check for evidence of spills or releases in unloading area	After each truck/tankloading/unloading
	Check for removal of spill absorbent and cleanup materials	Daily
	Check for cracks and gaps in base, concrete slab and sump	Daily
Storage Tanks/Containment Area	Check for evidence of spilled material	Daily
	Check for cracks and gaps in base, dike and sumps	Daily
	Check for evidence of releases outside containment	Daily
Storage Tanks	Check tank integrity	Annually
Associated piping/system, fittings, joints and seams	Check for evidence of corrosion/leaks	Daily

TYPES OF PROBLEMS		
EQUIPMENT/AREA INSPECTED	INSPECTION PROCEDURES	INSPECTION FREQUENCY
CONTAINMENT BUILDING		
Run-on and runoff control systems	Check for deterioration, malfunctions or improper operation, i.e., erosion, settlement, obstructions	Weekly and after storms
Wind dispersal control	Check for proper functioning, i.e., need for additional dampening with water truck	Weekly and after storms
Leak collection and removal system	Check for presence of leachate	Weekly and after storms
	Check for proper functioning	Weekly and after storms
SECURITY DEVICES		
Door Locks	Check for proper door lock function	Weekly
Warning Signs	Check for visibility, legibility	Weekly
OPERATING AND STRUCTURAL EQUIPMENT		
Loading and unloading areas	Check for evidence of spilled material on slab	Daily when in use and after each use
Front-end loader	Check hydraulic fluid level	Daily when in use
	Check for smooth operation	Daily when in use
Storage areas, concrete floor	Check for evidence of spilled materials	Daily when in use, otherwise weekly
Secondary containment systems	Check for evidence of spilled material in drains and sumps	Daily when in use, otherwise weekly
Solidification area	Check for evidence of spilled material on floor and in floor drain	Daily when in use, otherwise weekly
Pumps	As per manufacturer's specifications	Weekly
Drum crusher	As per manufacturer's specifications	Daily when in use
Conveyors	Check for proper operation	Daily when in use
Mixer	As per manufacturer's specifications	Daily when in use

ATTACHMENT B

POST-CLOSURE INSPECTION SCHEDULE

1438120003 – Peoria County

Peoria Disposal Company

ILD000805812

POST-CLOSURE INSPECTION SCHEDULE

1. Final Cover

Items to be inspected semi-annually and problems to look for include:

- Seepage
- Fire, smoke, fumes, gases (other than gas vents)
- Settling, cracking of cover soil
- Subsidence of cover, pooling
- Erosion, gullies, soil loss
- Rodent burrows
- Lost or poor grass cover
- Need for mowing, fertilizing grass
- Tree sapling growth

2. Leachate Collection and Removal System

The leachate collection and removal system will be inspected for the following items and problems:

- Level of leachate near level of inlet pipe (remove)
- Sediments in collection sump (remove)
- Pump corrosion, encrustation, failure (replace)
- Clogged collection drain pipes (clean, flush)
- Degradation of collection riser/manhole (replace, repair)

3. Groundwater Monitoring System

Inspection items and problems will include:

- Well casing encrustation, corrosion (replace if inoperative);
- Well screen encrustation, corrosion (replace if inoperative);
- Pump encrustation, corrosion, failure (replace as required);
- Soil erosion around the well (replace soil as required).

4. Run-On and Run-Off Control Systems

Run-on and run-off control system items and problems to be inspected include:

- Erosion of drainage ditches, dikes, etc.
- Settlement of drainage ditches, dikes, etc.
- Obstructions in drainage ditches, collection sumps
- Failure of berms, dikes
- Grass too high or too low

5. Surveyed Benchmarks

Surveyed benchmarks will be inspected to ensure that they are present and undamaged.

6. Access Control

The six-foot high chain link fence with warning signs will be inspected for the following:

Gaps, corrosion

Condition and presence of warning signs

7. Gas Collection and Venting System

The gas collection system vents and well will be inspected for clogging

ATTACHMENT C

WASTE LISTS AND HAZARDOUS WASTE IDENTIFICATION NUMBERS

1438120003 – Peoria County

Peoria Disposal Company

ILD000805812

WASTE LISTS AND HAZADOUS WASTE IDENTIFICATION NUMBERS

<u>Table</u>	<u>Process Code</u>	<u>Process</u>	<u>Section in Permit</u>
C-1	S01	Container Storage	II
C-1	S02	Tank Storage	III
C-1	S06	Containment Building	IV
C-2	S04	Surface Impoundment Storage	V
C-1	T01	Treatment in Tanks	III
C-1	D80	Landfill Disposal	VI*
C-1	T04	Chemical, Physical and Biological Treatment	III

*Post-closure requirements only

Table C-1 - Characteristic Waste	
Waste Code	Description
D002	Corrosive pH <2.0 or ≥ 12.5
D004	Arsenic
D005	Barium
D018	Benzene
D006	Cadmium
D019	Carbon Tetrachloride
D020	Chlordane
D021	Chlorobenzene
D022	Chloroform
D007	Chromium
D023	o-Cresol
D024	m-Cresol
D025	p-Cresol
D026	Cresol
D016	2,4-D
D027	1,4-Dichlorobenzene
D028	1,2-Dichlorobenzene
D029	1,1-Dichloroethylene
D030	2,4-Dinitrotoluene
D012	Endrin
D031	Heptachlor (and its hydroxide)
D032	Hexachlorobenzene
D033	Hexachloro-1,3- butadiene
D034	Hexachloroethane
D008	Lead
D013	Lindane
D009	Mercury
D014	Methoxychlor
D035	Methyl ethyl ketone
D036	Nitrobenzene
D037	Pentachlorophenol
D038	Pyridine
D010	Selenium
D011	Silver
D039	Tetrachloroethylene
D015	Toxaphene
D040	Trichloroethylene
D041	2,4,5-Trichlorophenol
D042	2,4,6-Trichlorophenol
D017	2,4,5-TP (Silvex)
D043	Vinyl Chloride

Table C-1 (Cont.) - Hazardous Waste From Non-Specific Sources

Code	Description
F001	The following spent halogenated solvents used in degreasing tetrachloroethylene, trichloroethylene, methylene chloride, 1,1,1-trichloroethane, carbon tetrachloride, and chlorinated fluorocarbons; all spent solvent mixtures and blends used in degreasing containing, before use, a total of ten percent or more (by volume) of one or more of the above halogenated solvents or those solvents listed in F002, F004 or F005; and still bottoms 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; and 1,1,2-trichloroethane; all spent solvent mixtures and blends containing, before use, a total of ten percent or more (by volume) of one or more of the above halogenated solvents or those solvents listed in F001, F004, or F005; and 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-butyl alcohol, cyclohexanone, and methanol; all spent solvent mixtures and blends containing, before use, only the above spent non-halogenated solvents; and all spent solvent mixtures and blends containing, before use, one or more of the above non-halogenated solvents and a total of ten percent or more (by volume) of one or more of those solvents listed in F001, F002, F004 or F005; and still bottoms from the recovery of these spent solvents and spent solvent mixtures.
F004	The following spent non-halogenated solvents: cresols and cresylic acid, and nitrobenzene; all spent solvent mixtures and blends containing, before use, a total of ten percent or more (by volume) of one or more of the above non-halogenated solvents or those solvents listed in F001, F002 or F005; 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 and 2-nitropropane; all spent solvent mixtures and blends, containing, before use, a total of ten percent or more (by volume) of one or more of the above non-halogenated solvents or those solvents listed in F001, F002 or F004; and still bottoms from the recovery of these spent solvents and spent solvent mixtures.
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 wastewater 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	Process wastes including but not limited to, distillation residues, heavy ends, tars, and reactor cleanout wastes, from the production of certain chlorinated aliphatic hydrocarbons by free radical catalyzed processes. These chlorinated aliphatic hydrocarbons are those having carbon chain lengths ranging from one to and including five with varying amounts of positions of chlorine substitution. (This listing does not include wastewaters, wastewater treatment sludges, spent catalysts and wastes listed in this Section or Section 721.132.)
F025	Condensed light ends, spent filters and filter aids, and spent dessicant wastes from the production of certain chlorinated aliphatic hydrocarbons by free radical catalyzed processes. These chlorinated aliphatic hydrocarbons are those having carbon chain lengths ranging from one to and including five, with varying amounts of positions of chlorine substitution.
F028	Residues resulting from the incineration or thermal treatment of soil contaminated with hazardous waste numbers F020, F021, F022, F023, F026 and F027.
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 261.35 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 and/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 and/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 and/or pentachlorophenol.
F037	Petroleum refinery primary oil/water/solids separation sludge (gravitational separation).
F038	Petroleum refinery secondary (emulsified) oil/water/solids separation sludge (physical and/or chemical separation).
F039	Leachate -- multi-source.

*reactive sulfide and/or reactive cyanide levels <100 ppm each.

Table C-1 (Cont.) - Wood Preservation

Code	Description
K001	Bottom sediment sludge from the treatment of wastewaters from wood preserving processes that use creosote and/or pentachlorophenol.
Inorganic Pigments	
Code	Description
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.
K006	Wastewater treatment sludge from the production of chrome 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.
Organic Chemicals	
Code	Description
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 acetronitrile column in the production of acrylonitrile.
K014	Bottoms from the acetronitrile 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.
K024	Distillation bottoms from the production of phthalic anhydride from naphthalene.
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.
K025	Distillation bottoms from the production of nitrobenzene by the nitration of benzene.
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-trichloroethane.
K029	Waste from the product stream stripper in the production of 1,1,1-trichloroethane.
K095	Distillation bottoms from the production of 1,1,1-trichloroethane.
K096	Heavy ends from the heavy ends column from the production of 1,1,1-trichloroethane.
K030	Column bottoms or heavy ends from the combined production of trichloroethylene and perchloroethylene.
K083	Distillation bottoms from aniline production.
K103	Process residues from aniline extraction from the production of aniline.
K104	Combined wastewater streams generated from nitrobenzene/aniline production.
K085	Distillation or fractionation column bottoms from the production of chlorobenzenes.
K105	Separated aqueous stream from the reactor product washing step in the production of chlorobenzenes.
K107	Column bottoms from product separation from the production of 1,1-dimethylhydrazine (UDMH) from carboxylic acid hydralides.
K108	Condensed column overheads from product separation and condensed reactor vent gases from the production of 1,1-dimethylhydrazine (UDMH) from carboxylic acid hydrazides.
K109	Spent filter cartridges from the product purification from the production of 1,1-dimethylhydrazine (UDMH) from carboxylic acid hydrazides.
K110	Condensed column overheads from intermediate separation from the production of 1,1-dimethylhydrazine (UDMH) from carboxylic acid hydrazides.
K111	Product wastewaters from the production of dinitrotoluene via nitration of toluene.

Table C-1 – Organic Chemicals (Cont.)

Code	Description
K112	Reaction by-product water from the drying column in the production of toluene-diamine via hydrogenation of dinitrotoluene.
K113	Condensed liquid light ends from the purification of toluenediamine in the production of toluenediamine via hydrogenation of 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 ethene.
K118	Spent adsorbent solids from purification of ethylene dibromide in the production of ethylene dibromide via bromination of ethene.
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.
K157	Wastewaters (including scrubber waters, condenser waters, washwaters, and separation waters) from the production of carbamates and carbamoyl oximes. (This listing does not apply to wastes generated from the manufacture of 3-iodo-2-propynyl n-butylcarbamate.)
K158	Baghouse dusts and filter/separation solids from the production of carbamates and carbamoyl oximes. (This listing does not apply to wastes generated from the manufacture of 3-iodo-2-propynyl n-butylcarbamate.)
K159	Organics from the treatment of thiocarbamate wastes.
K161	Purification solids (including filtration, evaporation, and centrifugation solids), bag house dust and floor sweepings from the production of dithiocarbamate acids and their salts. (This listing does not include K125 or K126.)
K174	Wastewater treatment sludges from the production of ethylene dichloride or vinyl 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 made (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 monitoring mercuric chloride catalyst in an acetylene-based process.

Table C-1 (Cont.) - Inorganic Chemicals Production Wastes

Code	Description
K071	Brine purification muds from the mercury cell process in chlorine production, where separately prepurified brine is not used.
K073	Chlorinated hydrocarbon waste from the purification step of the diaphragm cell process using graphite anodes in chlorine production.
K106	Wastewater treatment sludge from the mercury cell process in chlorine production.
K176	Baghouse filters from the production of antimony oxide, including filters from the production of intermediates (e.g., antimony metals or crude antimony oxide).
K177	Slag from the production of antimony oxide that is speculatively accumulated or disposed of, including slag from the production of intermediates (e.g., antimony metal or crude antimony oxide).
K178	Residues from manufacturing and manufacturing-site storage of ferric chloride from acids formed during the production of titanium dioxide using the chloride-ilmenite process.
K181	<p>Nonwastewaters from the production of dyes or pigments (including nonwastewaters commingled at the point of generation with nonwastewaters from other processes) that, at the point of generation, contain mass loadings of any of the constituents identified in subsection (c) of this Section that are equal to or greater than the corresponding subsection (c) levels, as determined on a calendar year basis. These wastes will not be hazardous if the nonwastewaters are managed in one of the following ways:</p> <ol style="list-style-type: none"> 1) They are disposed of in a municipal solid waste landfill unit that is subject to the design criteria in 35 Ill. Adm. Code 811.303 through 811.309 and 811.315 through 811.317 and Subpart E of 35 Ill. Adm. Code 811 or 35 Ill. Adm. Code 814.302 and 814.402; 2) They are disposed of in a hazardous waste landfill unit that is subject to either 35 Ill. Adm. Code 724.401 or 725.401; 3) They are disposed of in other municipal solid waste landfill units that meet the design criteria in 35 Ill. Adm. Code 811.303 through 811.309 and 811.315 through 811.317 and Subpart E of 35 Ill. Adm. Code 811 or 35 Ill. Adm. Code 814.302 and 814.402, 35 Ill. Adm. Code 724.401, or 35 Ill. Adm. Code 725.401; or 4) They are treated in a combustion unit that is permitted under 415 ILCS 5/39(d), or an onsite combustion unit that is permitted under 415 ILCS 5/39.5. <p>For the purposes of this listing, dyes or pigments production is defined in subsection (b)(1) of this Section. Subsection (d) of this Section describes the process for demonstrating that a facility's nonwastewaters are not K181 waste. This listing does not apply to wastes that are otherwise identified as hazardous under Sections 721.121 through 721.124 and 721.131 through 721.133 at the point of generation. Also, the listing does not apply to wastes generated before any annual mass loading limit is met, as set forth in subsection (c) of this Section.</p>

Pesticides Production Wastes

Code	Description
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.
K097	Vacuum stripper discharge from the chlordane chlorinator 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 filtration of diethylphosphorodithioic acid in the production of phorate.
K040	Wastewater treatment sludge from the production of phorate.
K041	Wastewater treatment sludge from the production of toxaphene.
K098	Untreated process wastewater 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.
K099	Untreated wastewater from the production of 2,4-D.
K123	Process wastewater (including supernates, filtrates and washwaters) from the production of ethylenebisdithiocarbamic acid and its salts.
K124	Reactor vent scrubber water from the production of tetrachlorobenzene in the production of 2,4,5-T.
K125	Filtration, evaporation and centrifugation solids from the production of ethylenebisdithiocarbamic acid and its salts.
K126	Baghouse dust and floor sweepings in milling and packaging operations from the production or formulation of ethylenebisdithiocarbamic acid and its salts.
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 from the production of methyl bromide.

Table C-1 (Cont.) Explosives Production Wastes

Code	Description
*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.
*reactive levels <100 ppm	
Petroleum Refining Wastes	
Code	Description
K048	Dissolved air flotation (DAF) 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.
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).
Iron and Steel Production Wastes	
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) (as defined in 35 Ill. Adm. Code 720.110).
Primary Copper	
K064	Acid plant blowdown slurry or sludge resulting from the thickening of blowdown slurry from primary copper production.
Primary Lead	
K065	Surface impoundment solids contained in and dredged from surface impoundments at primary lead smelting facilities.
Primary Zinc	
K066	After June 30, 1990, sludge from treatment of process wastewater or acid plant blowdown from primary zinc productions.
Primary Aluminum	
K088	Spent potliners from primary aluminum reduction.
Ferroalloys:	F
K090	Emission control dust or sludge from ferrochromiumsilicon production.
K091	Emission control dust or sludge from ferro chromium production.
Secondary Lead:	F
K069	Emission control dust/sludge from secondary lead smelting.
K100	Waste leaching solution from acid leaching of emission control dust/sludge from secondary lead smelting.
Veterinary Pharmaceuticals	
K084	Wastewater treatment sludges generated during the production of veterinary pharmaceuticals from arsenic or organo-arsenic compounds.
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 use of activated carbon for decolorization in the production of veterinary pharmaceuticals from arsenic or organo-arsenic compounds.
Ink Formulation:	F
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.
Table C-1 (Cont.) Coking	
K060	Ammonia still lime sludge from coking operations.
K087	Decanter tank tar sludge from coking operations.
K141	Process residues from the recovery of coal tar, including, but not limited to, collection 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 sludges 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.
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 sump residues 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 naphthalene 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.
K149	Distillation bottoms from the production of a-(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 a-(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 a-(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. (This listing does not apply to wastes generated from the manufacture of 3-iodo-2-propynyl n-butylcarbamate.)

Table C-1 (Cont.) P Wastes

Code	Substance
P023	Acetaldehyde, chloro-
P002	Acetamide, N-(aminothioxomethyl)-
P057	Acetamide, 2-fluoro-
P058	Acetic acid, fluoro-, sodium salt
P002	1-Acetyl-2-thiourea
P003	Acrolein
P070	Aldicarb
P203	Aldicarb sulfone
P004	Aldrin
P005	Allyl alcohol
P006	Aluminum phosphide (R,T)
P007	5-(Aminomethyl)-3-isoxazolol
P008	4-Aminopyridine
P009	Ammonium picrate (R)
P119	Ammonium vanadate
P099	Argentate (1-), bis(cyano-C)-, potassium
P010	Arsenic acid H ₃ AsO ₄
P012	Arsenic oxide As ₂ O ₃
P011	Arsenic oxide As ₂ O ₅
P011	Arsenic pentoxide
P012	Arsenic trioxide
P038	Arsine, diethyl-
P036	Arsonous dichloride, phenyl-
P054	Aziridine
P067	Aziridine, 2-methyl
P013	Barium cyanide
P024	Benzenamine, 4-chloro-
P077	Benzenamine, 4-nitro-
P028	Benzene, (chloromethyl)-
P042	1,2-Benzenediol, 4-[1-hydroxy-2-(methyl-Mamino)ethyl]-, (R)-
P046	Benzeneethanamine, alpha, alpha-dimethyl-
P014	Benzenethiol
P127	7-Benzofuranol, 2,3-dihydro-2,2-dimethyl-, methylcarbamate
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)
P001	2H-1-Benzopyran-2-one, 4-hydroxy-3-(3-oxo-1-phenylbutyl)-, and salts, when present at concentrations greater than 0.3%
P028	Benzyl chloride
P015	Beryllium
P017	Bromoacetone
P018	Brucine
P045	2-Butanone, 3,3-dimethyl-1-(methylthio)-O-[methylamino] carbonyl]oxime
P021	Calcium cyanide
P021	Calcium cyanide Ca(CN) ₂
P189	Carbamic acid, [(dibutylamino)-thio]methyl-, 2,3-dihydro-2,2-dimethyl-7-benzofuranyl ester
P191	Carbamic acid, dimethyl-, 1-((dimethyl-amino)carbonyl)-5-methyl-1H-pyrazol-3-yl ester
P192	Carbamic acid, dimethyl-, 3-methyl-1-(1-methylethyl)-1H-pyrazol-5-yl ester
P190	Carbamic acid, methyl-, 3-methylphenyl ester
P127	Carbofuran
P022	Carbon disulfide
P095	Carbonic dichloride
P023	Chloroacetaldehyde
P189	Carbosulfan
P024	p-Chloroaniline
P026	1-(o-Chlorophenyl) thiourea
P027	3-Chloropropionitrile

Table C-1 (Cont.) – P Wastes

Code	Substance
P029	Copper cyanide
P029	Copper cyanide CuCN
P202	m-Cumenyl methylcarbamate
P030	Cyanides (soluble cyanide salts), not otherwise specified
P031	Cyanogen
P033	Cyanogen chloride CNC1
P034	2-Cyclohexyl-4, 6-dinitrophenol
P016	Dichloromethyl ether
P036	Dichlorophenylarsine
P037	Dieldrin
P038	Diethylarsine
P041	Diethyl-p-nitrophenyl phosphate
P040	O,O-Diethyl O-pyrazinylphosphorothioate
P043	Diisopropylfluorophosphate (DFP)
P004	1,4,5,8-Dimethanonaphthalene, 1,2,3,4,10,10- hexachloro-1,4,4a,5,8,8a-hexahydro-, (1alpha, 4alpha, 4beta, 5alpha, 8alpha, 8beta)-
P060	1,4,5,8-Dimethanonaphthalene, 1,2,3,4,10,10- hexachloro-1,4,4a,5,8, 8a-hexahydro-, (1alpha, 4alpha, 4beta, 5beta, 8beta, 8beta)-
P037	2,7:3,6-Dimethanonaphth [2,3-b]oxirene, 3,4,5,6, 9,9-hexachloro-1a,2,2a,3,6,6a,7,7a-octahydro-, (1alpha, 2beta, 2alpha, 3beta, 6beta, 6alpha, 7beta, 7alpha)-
P051	2,7:3,6-Dimethanonaphth [2,3-b]oxirene, 3,4,5,6, 9,9-hexachloro-1a,2,2a,3,6,6a,7,7a-octahydro-, (1alpha, 2beta, 2beta, 3alpha, 6alpha, 6beta, 7beta, 7alpha)-, and metabolites
P044	Dimethoate
P046	alpha, alpha-Dimethyl phenethylamine
P191	Dimetilan
P047	4,6-Dinitro-o-cresol and salts
P048	2,4-Dinitrophenol
P020	Dinoseb
P085	Diphosphoramidate, octamethyl-
P111	Diphosphoric acid, tetraethyl ester
P039	Disulfoton
P049	Dithiobiuret
P185	1,3-Dithiolane-2-carboxaldehyde, 2,4-dimethyl-, O-[(methylamino)- carbonyl]oxime
P050	Endosulfan
P088	Endothall
P051	Endrin
P051	Endrin, and metabolites
P042	Epinephrine
P031	Ethanedinitrile
P066	Ethanimidothioic acid, N-[[[(methylamino) carbonyl]oxy]-, methylester
P194	Ethanimidothioic acid, 2-(dimethylamino)-N-(((methylamino)carbonyl)oxy)-2-oxo-, methyl ester
P101	Ethyl cyanide
P054	Ethylenimine
P097	Famphur
P056	Fluorine
P057	Fluoroacetamide
P058	Fluoroacetic acid, sodium salt
P198	Formetanate hydrochloride
P197	Formparanate
P065	Fulminic acid, mercury(2+) salt (R,T)
P059	Heptachlor
P062	Hexaethyl tetraphosphate
P116	Hydrazinecarbothioamide
P068	Hydrazine, methyl-
P063	Hydrocyanic acid
P063	Hydrogen cyanide

Table C-1 (Cont.) – P Wastes

Code	Substance
P096	Hydrogen phosphide
P060	Isodrin
P192	Isolan
P202	3-Isopropylphenyl-N-methylcarbamate
P007	3(2H)-Isoxazolone, 5-(aminomethyl)-
P196	Manganese, bis(dimethylcarbamodithioato-S,S')
P196	Manganese dimethyldithiocarbamate
P092	Mercury, (acetato-O)phenyl-
P065	Mercury fulminate (R,T)
P082	Methanamine, N-methyl-N-nitroso-
P064	Methane, isocyanato-
P016	Methane, oxybis(chloro-
P112	Methane, tetranitro- (R)
P118	Methanethiol, trichloro-
P198	Methanimidamide, N,N-dimethyl-N'-[3-[(methylamino)carbonyloxy]phenyl]-, monohydrochloride
P197	Methanimidamide, N,N-dimethyl-N'-[2-methyl-4-[(methylamino)carbonyloxy]phenyl]-
P050	6,9-Methano-2,4,3-benzodioxathiepen, 6,7,8,9, 10,10-hexachloro-1,5,5a,6,9,9a-hexahydro-,3-oxide
P059	4,7-Methano-1H-indene, 1,4,5,6,7,8,8-heptachloro-3a,4,7, 7a-tetrahydro-
P199	Methiocarb
P066	Methomyl
P068	Methyl hydrazine
P064	Methyl isocyanate
P069	2-Methylactonitrile
P071	Methyl parathion
P190	Metolcarb
P128	Mexacarbate
P072	alpha-Naphthylthiourea
P073	Nickel carbonyl
P073	Nickel carbonyl Ni(CO) ₄ , (T-4)-
P074	Nickel cyanide
P074	Nickel cyanide Ni(CN) ₂
P075	Nicotine, and salts
P076	Nitric oxide
P077	p-Nitroaniline
P078	Nitrogen dioxide
P076	Nitrogen oxide NO
P078	Nitrogen oxide NO ₂
P081	Nitroglycerine (R)
P082	N-Nitrosodimethylamine
P084	N-Nitrosomethylvinylamine
P085	Octamethylpyrophosphoramidate
P087	Osmium oxide OsO ₄ , (T-4)-
P087	Osmium tetroxide
P194	Oxamyl
P088	7-Oxabicyclo[2.2.1] heptane-2,3-dicarboxylic acid
P089	Parathion
P034	Phenol, 2-cyclohexyl-4,6-dinitro-
P048	Phenol, 2,4-dinitro-
P047	Phenol, 2-methyl-4,6-dinitro-, and salts
P020	Phenol, 2-(1-methylpropyl)-4,6-trinitro-
P009	Phenol, 2,4,6-trinitro-, ammonium salt (R)
P128	Phenol, 4-(dimethylamino)-3,5-dimethyl-, methylcarbamate (ester)
P199	Phenol, (3,5-dimethyl-4-(methylthio)-, methylcarbamate
P202	Phenol, 3-(1-methylethyl)-, methyl carbamate
P201	Phenol, 3-methyl-5-(1-methylethyl)-, methyl carbamate

Table C-1 (Cont.) – P Wastes

Code	Substance
P092	Phenylmercury acetate
P093	Phenylthiourea
P094	Phorate
P095	Phosgene
P096	Phosphine
P041	Phosphoric acid, diethyl 4-nitrophenyl ester
P039	Phosphorodithioic acid, 0,0-diethyl S-[2- (ethylthio)ethyl] ester
P094	Phosphorodithioic acid, 0,0-diethyl S-[(ethyl thio)methyl] ester
P044	Phosphorodithioic acid, O,O-dimethyl S-[2-(methylamino)- 2-oxoethyl]ester
P043	Phosphorofluoric acid, bis(1-methylethyl)ester
P089	Phosphorothioic acid, O,O-diethyl O-(4-nitrophenyl) ester
P040	Phosphorothioic acid, O,O-diethyl O-pyrazinyl ester
P097	Phosphorothioic acid, O-[4-[dimethylamino sulfonyl]phenyl]O, O-dimethyl ester
P071	Phosphorothioic acid, 0,0-dimethyl O-(4-nitrophenyl)ester
P204	Physostigmine
P188	Physostigmine salicylate
P110	Plumbane, tetraethyl-
P098	Potassium cyanide
P098	Potassium cyanide KCN
P099	Potassium silver cyanide
P201	Promecarb
P203	Propanal, 2-methyl-2-(methyl-sulfonyl)-, O-((methylamino)carbonyl) oxime
P070	Propanal, 2-methyl-2-(methylthio)-, O-[(methylamino) carbonyl]oxime
P101	Propanenitrile
P027	Propanenitrile, 3-chloro-
P069	Propanenitrile, 2-hydroxy-2-methyl-
P081	1,2,3-Propanetriol, trinitrate- (R)
P017	2-Propanone, 1-bromo-
P102	Propargyl alcohol
P003	2-Propenal
P005	2-Propen-1-ol
P067	1,2-Propylenimine
P102	2-Propyn-1-ol
P008	4-Pyridinamine
P204	Pyrrolo[2,3-b]indol-5-ol, 1,2,3,3a,8,8a-hexahydro-1,3a,8-trimethyl-, methylcarbamate (ester), (3aS-cis)-
P075	Pyridine, 3-(1-methy-2-pyrrolidinyl)-, (S-) and salts
P114	Selenious acid, dithallium (1+) salt
P103	Selenourea
P104	Silver cyanide
P104	Silver cyanide AgCN
P105	Sodium azide
P106	Sodium cyanide
P106	Sodium cyanide NaCN
P108	Strychnidin-10-one, and salts
P018	Strychnidin-10-one, 2,3-dimethoxy-
P108	Strychnine and salts
P115	Sulfuric acid, dithallium (1+) salt
P109	Tetraethyldithiopyrophosphate
P110	Tetraethyl lead
P111	Tetraethylpyrophosphate
P112	Tetranitromethane (R)
P062	Tetraphosphoric acid, hexaethyl ester
P113	Thallic oxide
P113	Thallium oxide Tl ₂ O ₃

Table C-1 (Cont.) – P Wastes

Code	Substance
P114	Thallium(I) selenite
P115	Thallium (I) sulfate
P109	Thiodiphosphoric acid, tetraethyl ester
P045	Thiofanox
P049	Thioimidodicarbonic diamide [(H ₂ N)C(S)] ₂ NH
P014	Thiophenol
P116	Thiosemicarbazide
P026	Thiourea, (2-chlorophenyl)-
P072	Thiourea, 1-naphthalenyl-
P093	Thiourea, phenyl-
P185	Tirpate
P123	Toxaphene
P118	Trichloromethanethiol
P119	Vanadic acid, ammonium salt
P120	Vanadium oxide V ₂ O ₅
P120	Vanadium pentoxide
P084	Vinylamine, N-methyl-N-nitroso-
P001	Warfarin, and salts, when present at concentration greater than 0.3%
P185	Triplate
P121	Zinc Cyanide Zn (CN) ₂
P122	Zinc phosphide Zn ₃ P ₂ -, when present at concentrations greater than 10% (R, T)
P205	Zinc, bis(dimethylcarbamo-dithioato-S,S')-
U Wastes	
Code	Substance
U001	Acetaldehyde (I)
U034	Acetaldehyde, trichloro-
U187	Acetamide, N-(4-ethoxyphenyl)-
U005	Acetamide, N-9H-fluoren-2-yl-
U240	Acetic acid, (2,4-dichlorophenoxy)-, salts and esters
U112	Acetic acid, ethyl ester (I)
U144	Acetic acid, lead (2+) salt
U214	Acetic acid, thallium(I+) salt See F027 Acetic acid, (2,4,5-trichlorophenoxy)-
U002	Acetone (I)
U003	Acetonitrile (I,T)
U004	Acetophenone
U005	2-Acetylaminofluorene
U006	Acetyl chloride (C,R,T)
U007	Acrylamide
U008	Acrylic acid (I)
U009	Acrylonitrile
U011	Amitrole
U012	Aniline (I,T)
U136	Arsinic acid, dimethyl-
U014	Auramine
U015	Azaserine
U365	H-Azepine-1-carbothioic acid, hexahydro-, S-ethyl ester
U010	-Azirino[2',3':3,4]pyrrolo[1,2-a]indole-4,7-dione, 6-amino-8-[[[(aminocarbonyl)oxy]methyl]-1,1a,2,8,8a,8b-hexahydro-8a-methoxy-5-methyl-, [1a-S-(1alpha, 8beta, 8a, 8balpha)]-
U280	Barban
U278	Bendiocarb
U364	Bendiocarb phenol
U271	Benomyl

Table C-1 (Cont.) – U Wastes

Code	Substance
U157	Benz[j]aceanthrylene, 1,2-dihydro-3-methyl-
U016	Benz(c)acridine
U017	Benzal chloride
U192	Benzamide, 3, 5-dichloro-N-(1,1-dimethyl-2-propynyl)-
U018	Benz[a]anthracene
U094	Benz[a]anthracene, 7,12-dimethyl-
U012	Benzenamine (I,T)
U014	Benzenamine, 4,4'-carbonimidoylbis[N,N-dimethyl-
U049	Benzenamine, 4-chloro-2-methyl-,hydrochloride
U093	Benzenamine, N,N-dimethyl-4-(phenylazo)-
U328	Benzenamine, 2-methyl-
U353	Benzenamine, 4-methyl-
U158	Benzenamine, 4,4'-methylenebis[2-chloro-
U222	Benzenamine, 2-methyl-, hydrochloride
U181	Benzenamine, 2-methyl-5-nitro
U019	Benzene (I,T)
U038	Benzenoacetic acid, 4-chloro-alpha-(4-chlorophenyl)-alpha- hydroxy-, ethyl ester
U030	Benzene, 1-bromo-4-phenoxy-
U035	Benzenobutanoic acid, 4-[bis(2-chloroethyl) amino]-
U037	Benzene, chloro-
U221	Benzenediamine, ar-methyl-
U028	1,2-Benzenedicarboxylic acid, bis(2-ethylhexyl) ester
U069	1,2-Benzenedicarboxylic acid, dibutyl ester
U088	1,2-Benzenedicarboxylic acid, diethyl ester
U102	1,2-Benzenedicarboxylic acid, dimethyl ester
U107	1,2-Benzenedicarboxylic acid, dioctyl ester
U070	Benzene, 1,2-dichloro-
U071	Benzene, 1,3-dichloro-
U072	Benzene, 1,4-dichloro-
U060	Benzene, 1,1'-(2,2-dichloroethylidene)bis [4-chloro-
U017	Benzene, (dichloromethyl)-
U223	Benzene, 1,3-diisocyanatomethyl-(R,T)
U239	Benzene, dimethyl-(I,T)
U201	1,3-Benzenediol
U127	Benzene, hexachloro-
U056	Benzene, hexahydro-(I)
U220	Benzene, methyl-
U105	Benzene, 1-methyl 2,4-dinitro-
U106	Benzene, 2-methyl-1,3-dinitro-
U055	Benzene, (1-methylethyl)-(I)
U169	Benzene, nitro-
U183	Benzene, pentachloro-
U185	Benzene, pentachloronitro-
U020	Benzenesulfonic acid chloride (C,R)
U020	Benzenesulfonyl chloride(C,R)
U207	Benzene, 1,2,4,5-tetrachloro-
U061	Benzene, 1,1'-(2,2,2-trichloroethylidene)bis[4-chloro-
U247	Benzene, 1,1'-(2,2,2-trichloroethylidene)bis[4-methoxy-
U023	Benzene,(trichloromethyl)-
U234	Benzene, 1,3,5-trinitro-
U021	Benzidene
U202	1,2-Benzisothiazol-3(2H)-one, 1,1-dioxide, and salts
U278	1,3-Benzodioxol-4-ol, 2,2-dimethyl-, methyl carbamate
U364	1,3-Benzodioxol-4-ol, 2,2-dimethyl-

Table C-1 (Cont.) – U Wastes

Code	Substance
U203	1,3-Benzodioxole,5-(2-propenyl)-
U141	1,3-Benzodioxole,5-(1-propenyl)-
U090	1,3-Benzodioxole,5-propyl-
U367	7-Benzofuranol, 2,3-dihydro-2,2-dimethyl-
U064	Benzo[<i>rst</i>]pentaphene
U248	2H-1-Benzopyran-2-one,4-hydroxy-3-(3-oxo-1-phenylbutyl)-, and salts, when present at concentrations of 0.3% or less
U022	Benzo[<i>a</i>]pyrene
U197	p-Benzoquinone
U023	Benzotrichloride (C,R,T)
U085	2,2'-Bioxirane
U021	[1,1'-Biphenyl]-4,4'-diamine
U073	[1,1'-Biphenyl]-4,4'-diamine, 3,3'-dichloro-
U091	[1,1'-Biphenyl]-4,4'-diamine, 3,3'-dimethoxy-
U095	[1,1'-Biphenyl]-4,4'-diamine, 3,3'-dimethyl-
U401	Bis(dimethylthiocarbamoyl) sulfide
U400	Bix(pentamethylene)thiuram tetrasulfide
U225	Bromoform
U030	4-Bromophenyl phenyl ether
U128	1,3-Butadiene, 1,1,2,3,4,4-hexachloro-
U172	1-Butanamine, N-butyl-N-nitroso-
U031	1-Butanol (l)
U159	2-Butanone (l,T)
U160	2-Butanone, peroxide (R,T)
U053	2-Butenal
U074	2-Butene, 1,4-dichloro- (l,T)
U143	2-Butenoic acid, 2-methyl-,7-[[[2,3-dihydroxy-2-(1-methoxyethyl)-3-methyl-1-oxobutoxy]methyl]-2,3,5,7a-tetrahydro-1H-pyrrolizin-1-yl ester, [1S-[1alpha(Z), (2S*,3R*), 7aalpha]-
U031	n-Butyl alcohol (l)
U392	Butylate
U136	Cacodylic acid
U032	Calcium chromate
U372	Carbamic acid, 1H-benzimidazol-2-yl, methyl ester
U271	Carbamic acid, [1-[(butylamino)carbonyl]-1H-benzimidazol-2-yl]-, methyl ester
U375	Carbamic acid, butyl-, 3-iodo-2-propynyl ester
U280	Carbamic acid, (3-chlorophenyl)-, 4-chloro-2-butynyl ester
U373	Carbamic acid, phenyl-, 1-methylethyl ester
U409	Carbamic acid, [1,2-phenylenebis(iminocarbonothioyl)]bis-, dimethyl ester
U238	Carbamic acid, ethyl ester
U178	Carbamic acid, methylnitroso-, ethyl ester
U097	Carbamic chloride, dimethyl-
U379	Carbamodithioic acid, dibutyl, sodium salt
U277	Carbamodithioic acid, dibutyl-, 2-chloro-2-propenyl ester
U381	Carbamodithioic acid, dibutyl-, sodium salt
U383	Carbamodithioic acid, dimethyl, potassium salt
U382	Carbamodithioic acid, dimethyl-, sodium salt
U376	Carbamodithioic acid, dimethyl-, tetraanhydrosulfide with orthothioselenious acid
U378	Carbamodithioic acid, (hydroxymethyl)methyl-, monopotassium salt
U384	Carbamodithioic acid, methyl-, monosodium salt
U377	Carbamodithioic acid, methyl-, monopotassium salt
U389	Carbamothioic acid, bis(1-methylethyl)-, S-(2,3,3-trichloro-2-propenyl) ester
U392	Carbamodithioic acid, bis(2-methylpropyl)-, S-ethyl ester
U391	Carbamodithioic acid, butylethyl-, S-propyl ester
U386	Carbamodithioic acid, cyclohexylethyl-, S-ethyl ester
U390	Carbamodithioic acid, dipropyl-, S-ethyl ester

Table C-1 (Cont.) – U Wastes	
Code	Substance
U387	Carbamothioic acid, dipropyl-, S-(phenylmethyl) ester
U385	Carbamodithioic acid, dipropyl-, S-propyl ester
U114	Carbamodithioic acid, 1,2-ethanediylobis-, salts and esters
U062	Carbamothioic acid, bis(1-methylethyl)-, S-(2, 3-dichloro-2-propenyl)ester
U279	Carbaryl
U372	Carbendazim
U367	Carbofuran phenol
U215	Carbonic acid, dithallium (1+) salt
U033	Carbonic difluoride
U156	Carbonochloridic acid, methyl ester (1,T)
U033	Carbon oxyfluoride (R,T)
U211	Carbon tetrachloride
U034	Chloral
U035	Chlorambucil
U036	Chlordane alpha and gamma isomers
U026	Chlomaphazine
U037	Chlorobenzene
U038	Chlorobenzilate
U039	p-Chloro-m-cresol
U042	2-Chloroethyl vinyl ether
U044	Chloroform
U046	Chloromethyl methyl ether
U047	beta-Chloronaphthalene
U048	o-Chlorophenol
U049	4-chloro-o-toluidine, hydrochloride
U032	Chromic acid H ₂ CrO ₄ , calcium salt
U050	Chrysene
U393	Copper, bis(dimethylcarbamodithioato-S,S')-,
U393	Copper dimethyldithiocarbamate
U051	Creosote
U052	Cresol (Cresylic acid)
U053	Crotonaldehyde
U055	Cumeme (I)
U246	Cyanogen bromide CNBr
U386	Cycloate
U197	2,5-Cyclohexadienediene-1,4-dione
U056	Cyclohexane (I)
U129	Cyclohexane, 1,2,3,4,5,6-hexachloro-, (1alpha, 2alpha,3beta,4alpha,5alpha,6beta)-
U057	Cyclohexanone (I)
U130	1,3-Cyclopentadiene, 1,2,3,4,5,5-hexachloro-
U058	Cyclophosphamide
U240	2,4-D, salts and esters
U059	Daunomycin
U366	Dazomet
U060	DDD
U061	DDT
U062	Diallate
U063	Dibenz[a,h]anthracene
U064	Dibenzo[a,i]pyrene
U066	1,2-Dibromo-3-chloropropane
U069	Dibutyl phthalate
U070	o-Dichlorobenzene
U071	m-Dichlorobenzene
U072	p-Dichlorobenzene
U073	3,3'-Dichlorobenzidine

Table C-1 (Cont.) – U Wastes

Code	Substance
U074	1,4-Dichloro-2-butene (I,T)
U075	Dichlorodifluoromethane
U078	1,1-Dichloroethylene
U079	1,2-Dichloroethylene
U025	Dichloroethyl ether
U027	Dichloroisopropyl ether
U024	Dichloromethoxy ethane
U081	2,4-Dichlorophenol
U082	2,6-Dichlorophenol
U084	1,3-Dichloropropene
U085	1,2:3,4-Diepoxybutane (I,T)
U395	Diethylene glycol, dicarbamate
U108	1,4-Diethyleneoxide
U028	Diethylhexyl phthalate
U086	N,N-Diethylhydrazine
U087	O,O-Diethyl S-methyl dithiophosphate
U088	Diethyl phthalate
U089	Diethylstilbestrol
U090	Dihydrosafrole
U091	3,3'-Dimethoxybenzidine
U092	Dimethylamine (l)
U093	p-Dimethylaminoazobenzene
U094	7,12-Dimethylbenz[a]anthracene
U095	3,3'-Dimethylbenzidine
U096	alpha, alpha-Dimethylbenzylhydroperoxide (R)
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 (l)
U111	Di-n-propylnitrosamine
U403	Disulfiram
U041	Epichlorohydrin
U390	EPTC
U001	Ethanal (l)
U174	Ethanamine, N-ethyl-N-nitroso-
U155	1,2-Ethanediamine,N,N-dimethyl-N'-2-pyridinyl-N'-(2-thienylmethyl)-
U404	Ethanamine, N,N-diethyl-
U410	Ethanimidothioic acid, N,N' - [thiobis[(methylimino)carbonyloxy]]bis-, dimethyl ester
U394	Ethanimidothioic acid, 2-(dimethylamino)-N-hydroxy-2-oxo-, methyl ester
U067	Ethane, 1,2-dibromo-
U076	Ethane, 1,1-dichloro-
U077	Ethane, 1,2-dichloro-
U131	Ethane, hexachloro-
U024	Ethane, 1,1'-[methylenebis(oxy)]bis[2-chloro-
U117	Ethane, 1,1'-oxybis- (l)
U025	Ethane, 1,1'-oxybis[2-chloro-

Table C-1 (Cont.) – U Wastes	
Code	Substance
U184	Ethane, pentachloro-
U208	Ethane, 1,1,1,2-tetrachloro-
U209	Ethane, 1,1,2,2-tetrachloro-
U218	Ethanethioamide
U226	Ethane, 1,1,1-trichloro-
U227	Ethane, 1,1,2-trichloro-
U359	Ethanol, 2-ethoxy-
U173	Ethanol, 2,2'-(nitrosoimino)bis-
U395	Ethanol, 2,2'-oxybis-, dicarbamate
U004	Ethanone, 1-phenyl-
U043	Ethene, chloro-
U042	Ethene, (2-chloroethoxy)-
U078	Ethene, 1,1-dichloro-
U079	Ethene, 1,2-dichloro-, (E)-
U210	Ethene, tetrachloro-
U228	Ethene, trichloro-
U112	Ethyl acetate (I)
U113	Ethyl acrylate (I)
U238	Ethyl carbamate (urethane)
U117	Ethyl ether
U114	Ethylenebis dithiocarbamic acid, salts and esters
U067	Ethylene dibromide
U077	Ethylene dichloride
U359	Ethylene glycol monoethyl ether
U115	Ethylene oxide (I,T)
U116	Ethylenethiourea
U076	Ethylidene dichloride
U118	Ethyl methacrylate
U119	Ethyl methanesulfonate
U407	Ethyl Ziram
U396	Ferbam
U120	Fluoranthene
U122	Formaldehyde
U123	Formic acid (C,T)
U124	Furan (I)
U125	2-Furancarboxaldehyde (I)
U147	2,5-Furandione
U213	Furan, tetrahydro- (I)
U125	Furfural (I)
U124	Furfuran (I)
U206	Glucopyranose, 2-deoxy-2-(3-methyl-3-nitrosoureido)-,D-
U206	D-Glucose, 2-deoxy-2[[[(methylnitrosoamino)-carbonyl]amino]-
U126	Glycidylaldehyde
U163	Guanidine, N-methyl-N'-nitro-N-nitroso-
U127	Hexachlorobenzene
U128	Hexachlorobutadiene
U130	Hexachlorocyclopentadiene
U131	Hexachloroethane
U132	Hexachlorophene
U243	Hexachloropropene
U133	Hydrazine (R,T)
U086	Hydrazine, 1,2-diethyl-
U098	Hydrazine, 1,1-dimethyl-
U099	Hydrazine, 1,2-dimethyl-

Table C-1 (Cont.) – U Wastes

Code	Substance
U109	Hydrazine, 1,2-Diphenyl-
U134	Hydrofluoric acid (C,T)
U134	Hydrogen fluoride (C,T)
U135	Hydrogen sulfide
U135	Hydrogen sulfide H ₂ S
U096	Hydroperoxide, 1-methyl-1-phenylethyl- (R)
U116	2-Imidazolidinethione
U137	Indeno[1,2,3-cd]pyrene
U375	3-Iodo-2-propynyl n-butylcarbamate
U396	Iron, tris(dimethylcarbamo-dithioato-S,S')-
U190	1,3-Isobenzofurandione
U140	Isobutyl alcohol (I,T)
U141	Isosafrole
U142	Kepone
U143	Lasiocarpene
U144	Lead acetate
U145	Lead, bis(acetato-O)tetrahydroxytri-
U145	Lead phosphate
U146	Lead subacetate
U129	Lindane
U163	MNNG
U147	Maleic anhydride
U148	Maleic hydrazide
U149	Malononitrile
U150	Melphalan
U151	Mercury
U384	Metam Sodium
U152	Methacrylonitrile (I,T)
U092	Methanamine, N-methyl- (I)
U029	Methane, bromo-
U045	Methane, chloro- (I,T)
U046	Methane, chloromethoxy-
U068	Methane, dibromo-
U080	Methane, dichloro-
U075	Methane, dichlorodifluoro-
U138	Methane, iodo-
U119	Methanesulfonic acid, ethyl ester
U211	Methane, tetrachloro-
U153	Methanethiol (I,T)
U225	Methane, tribromo-
U044	Methane, trichloro-
U121	Methane, trichlorofluoro-
U036	4,7-Methan-1H-indene, 1,2,4,5,6,7,8,8-octa chloro-2,3,3a,4,7,7a-hexahydro-
U154	Methanol (I)
U155	Methapyrilene
U142	1,3,4-Metheno-2H-cyclobuta[cd]pentalen-2-one, 1,1a,3,3a,4,5,5a,5b, 6-decachlorooctahydro-
U247	Methoxychlor
U154	Methyl alcohol (I)
U029	Methyl bromide
U186	1-Methylbutadiene (I)
U045	Methyl chloride (I,T)
U156	Methyl chlorocarbonate (I,T)
U226	Methylchloroform
U157	3-Methylcholanthrene

Table C-1 (Cont.) – U Wastes

Code	Substance
U158	4,4'-Methylenbis(2-chloroaniline)
U068	Methylene bromide
U080	Methylene chloride
U159	Methyl ethyl ketone (MEK) (I,T)
U160	Methyl ethyl ketone peroxide (R,T)
U138	Methyl iodide
U161	Methyl isobutyl ketone (I)
U162	Methyl methacrylate (I,T)
U161	4-Methyl-2-pentanone (I)
U164	Methylthiouracil
U010	Mitomycin C
U365	Molinate
U279	1-Naphthalenol, methylcarbamate
U059	5,12-Naphthacenedione, (8S-cis)-8-acetyl-10-[(3-amino-2,3,6-trideoxy-alpha-L-lyxo-hexapyranosyl)oxyl]-7,8,9,10-tetrahydro-6,8,11-trihydroxy-1-methoxy-, (8S-cis)-
U167	1-Naphthalenamine
U168	2-Naphthalenamine
U026	Naphthaleneamine, N,N'-bis(2-chloroethyl)-
U165	Naphthalene
U047	Naphthalene, 2-chloro-
U166	1,4-Naphthalenedione
U236	2,7-Naphthalenedisulfonic acid, 3,3'-[(3,3'-dimethyl-[1,1'-biphenyl]-4,4'-diyl)bis(azo)bis[5-amino-4-hydroxy]-, salt
U166	1,4-Naphthoquinone
U167	alpha-Naphthylamine
U168	beta-Naphthylamine
U217	Nitric acid, thallium (I+) salt
U169	Nitrobenzene (I,T)
U170	p-Nitrophenol
U171	2-Nitropropane (I,T)
U172	N-Nitrosodi-n-butylamine
U173	N-Nitrosodiethanolamine
U174	N-Nitrosodiethylamine
U176	N-Nitroso-N-ethylurea
U177	N-Nitroso-N-methylurea
U178	N-Nitroso-N-methylurethane
U179	N-Nitrosopiperidine
U180	N-Nitrosopyrrolidine
U181	5-Nitro-o-toluidine
U193	1,2-Oxathiolane, 2,2-dioxide
U058	2H-1,3,2-Oxazaphosphorine-2-amine, N,N-bis(2-chloroethyl) tetrahydro-, 2-oxide
U115	Oxirane (I,T)
U126	Oxiranecarboxyaldehyde
U041	Oxirane, (chloromethyl)-
U182	Paraldehyde
U391	Pebulate
U183	Pentachlorobenzene
U184	Pentachloroethane
U185	Pentachloronitrobenzene (PCNB) See F027 Pentachlorophenol
U161	Pentanol, 4-methyl-
U186	1,3-Pentadiene (I)
U187	Phenacetin
U188	Phenol
U048	Phenol, 2-chloro-
U039	Phenol, 4-chloro-3-methyl-
U081	Phenol, 2,4-dichloro-

Table C-1 (Cont.) – U Wastes

Code	Substance
U082	Phenol, 2,6-dichloro-
U089	Phenol, 4,4'-(1,2-diethyl-1,2-ethenediyl)bis-, (E)-
U101	Phenol, 2,4-dimethyl-
U052	Phenol, methyl-
U132	Phenol, 2,2'-methylenebis [3,4,6-trichloro-
U170	Phenol, 4-nitro-
See F02	Phenol, pentachloro-
See F02	Phenol, 2,3,4,6-tetrachloro-
See F02	Phenol, 2,4,5-trichloro-
See F02	Phenol, 2,4,6-trichloro-
U411	Phenol, 2-(1-methylethoxy)-, methylcarbamate
U150	L-Phenylalanine, 4-[bis(2-chloroethyl)amino]-
U145	Phosphoric acid, lead (2+) salt (2:3)
U087	Phosphorodithioic acid, O,O-diethyl S-methyl ester
U189	Phosphorus sulfide (R)
U190	Phthalic anhydride
U191	2-Picoline
U179	Piperidine, 1-nitroso-
U400	Piperidine, 1,1'-(tetrathiodicarbonothioyl)-bis-
U383	Potassium dimethyldithiocarbamate
U378	Potassium n-hydroxymethyl- n-methyl-di-thiocarbamate
U377	Potassium n-methyldithiocarbamate
U192	Pronamide
U194	1-Propanamine (I,T)
U111	1-Propanamine, N-nitroso-N-propyl-
U110	1-Propanamine, N-propyl-(I)
U066	Propane, 1,2-dibromo-3-chloro-
U083	Propane, 1,1-dichloro
U149	Propanedinitrile
U171	Propane, 2-nitro- (I,T)
U027	Propane, 2,2'-oxybis [2-chloro-See F027Propanoic acid, 2-(2,4,5-trichlorophenoxy)-
U193	1,3-Propane sultone
U235	1-Propanol, 2,3-dibromo-, phosphate (3:1)
U140	1-Propanol, 2-methyl- (I,T)
U002	2-Propanone (I)
U007	2-Propenamade
U084	1-Propene, 1,3-dichloro-
U243	1-Propene, 1,1,2,3,3,3-hexachloro-
U009	2-Propenenitrile
U152	2-Propenenitrile, 2-methyl- (I,T)
U008	2-Propenoic acid (I)
U113	2-Propenoic acid, ethyl ester (I)
U118	2-Propenoic acid, 2-methyl-, ethyl ester
U162	2-Propenoic acid, 2-methyl-, methyl ester (I,T)
U373	Propam See F027Propionic acid, 2-(2,4,5-trichlorophenoxy)-
U411	Propoxur
U194	n-Propylamine (I,T)
U083	Propylene dichloride
U387	Prosulfocarb
U148	3,6-Pyridazinedione, 1,2-dihydro-
U196	Pyridine
U191	Pyridine, 2-methyl-
U237	2,4-(1H,3H)-Pyrimidinedione, 5-[bis(2-chloroethyl)amino]-
U164	4(1H)-Pyrimidinone, 2,3-dihydro-6-methyl-2-thioxo-

Table C-1 (Cont.) – U Wastes

Code	Substance
U180	Pyrrolidine, 1-nitroso
U200	Reserpine
U201	Resorcinol
U202	Saccharin and salts
U203	Safrole
U204	Selenious acid
U204	Selenium dioxide
U205	Selenium sulfide
U205	Selenium disulfide SeS ₂ (R,T)
U376	Selenium, tetrakis(dimethyl)dithiocarbamate)
U015	L-Serine, diazoacetate (ester) See F027 Silvex (2,4,5-TP)
U379	Sodium dibutyldithiocarbamate
U381	Sodium diethyldithiocarbamate
U382	Sodium dimethyldithiocarbamate
U206	Streptozotocin
U277	Sulfallate
U103	Sulfuric acid, dimethyl ester
U189	Sulfur phosphide (R) See F027 2,4,5-T
U402	Tetrabutylthiuram disulfide
U207	1,2,4,5-Tetrachlorobenzene
U208	1,1,1,2-Tetrachloroethane
U209	1,1,2,2-Tetrachloroethane
U210	Tetrachloroethylene - See F027 2,3,4,6-Tetrachlorophenol
U213	Tetrahydrofuran (I)
U401	Tetramethylthiuram monosulfide
U214	Thallium (I) acetate
U215	Thallium (I) carbonate
U216	Thallium (I) chloride
U216	Thallium (I) chloride TlCl
U217	Thallium (I) nitrate
U366	2H-1,3,5-Thiadiazine- 2-thione, tetrahydro-3,5-dimethyl-
U218	Thioacetamide
U410	Thiodicarb
U153	Thiomethanol (I,T)
U244	Thioperoxydicarbonic diamide [(H ₂ N)C(S)] ₂ S ₂ , tetramethyl-
U402	Thioperoxydicarbonic diamide, tetrabutyl
U403	Thioperoxydicarbonic diamide, tetraethyl
U409	Thiophanate-methyl
U219	Thiourea
U244	Thiram
U220	Toluene
U221	Toluenediamine
U223	Toluene diisocyanate (R,T)
U328	o-Toluidine
U353	p-toluidine
U222	o-Toluidine hydrochloride
U389	Triallate
U011	1H-1,2,4-Triazol-3-amine
U408	2,4,6-Tribromophenol
U227	1,1,2-Trichloroethane
U404	Triethylamine
U228	Trichloroethylene
U121	Trichloromonofluoromethane - See F027 2,4,5-Trichlorophenol See F027 2,4,6-Trichlorophenol
U234	1,3,5-Trinitrobenzene (R,T)

Table C-1 – U Wastes	
Code	Substance
U182	1,3,5-Trioxane, 2,4,6-trimethyl-
U235	Tris(2,3-dibromopropyl) phosphate
U236	Trypan blue
U237	Uracil mustard
U176	Urea, N-ethyl-N-nitroso-
U177	Urea, N-methyl-N-nitroso-
U385	Vernolate
U043	Vinyl chloride
U248	Warfarin, and salts, when present at concentrations of 0.3% or less
U239	Xylene (I)
U200	Yohimban-16-carboxylic acid, 11,17-dimethoxy-18-[(3,4,5-trimethoxybenzoyl)oxy]-,methyl ester,
U407	Zinc, bis(diethylcarbamodithioato-S,S')-
U249	Zinc phosphide Zn_3P_2 , when present at concentrations of 10% or less

Table C-2 – Surface Impoundment Storage	
Code	Waste Description
F039	Leachate resulting from the treatment, storage, or disposal of wastes classified by more than one waste code under Subpart D, or from a mixture of wastes classified under Subparts C and D. (Leachate resulting from the management of one or more of the following USEPA hazardous wastes and no other hazardous wastes retains its hazardous waste code(s): F020, F021, F022, F023, F026, F027, or F028.)

ATTACHMENT D

AVERAGED REPLICATE T-TEST

1438120003 – Peoria County

Peoria Disposal Company

ILD000805812

Averaged Replicate T-Test

The following statistical procedures must be followed as referenced in Sections VI and VI-A.

- 1) Average the replicate indicator values for each sampling event using the arithmetic mean (X) as follows:

$$X_r = \frac{X_1 + X_2 \dots + X_n}{n}$$

X = each replicate value
 n = the number of replicates
 X_r = averaged replicate value

- 2) Calculate the background mean (X_b) for each indicator parameter, using the averaged replicate values (X_r) from each background sampling event determined in paragraph 1 above as follows:

$$X_b = \frac{X_{r1} + X_{r2} \dots X_{rN}}{N}$$

X_r = each averaged replicate value
 N = the number of average replicate values (which is equal to the number of back ground sampling events)
 X_b = background mean

- 3) Calculate the background variance (S_b^2) of the averaged replicate values (X_r) determined in paragraph 1 using:

$$S_b^2 = \frac{(X_{r1} - X_b)^2 + (X_{r2} - X_b)^2 \dots + (X_{rN} - X_b)^2}{N-1}$$

- 4) For detection monitoring, an average replicate value should be calculated for each indicator parameter. The arithmetic mean of the replicate values (X_m) is calculated for each monitoring well being evaluated as follows:

$$X_m = \frac{X_{r1} + X_{r2} + \dots + X_{rn}}{n}$$

- 5) Calculate the t-statistic (t^*) as follows:

$$t^* = \frac{X_m - X_b}{S_b (1 + 1/mb)^{1/2}}$$

S_b = the standard deviation or $(S_b^2)^{1/2}$

mb = the number of background sampling events (e.g. for four (4) quarters of background sampling, mb would equal four (4). If two background wells are utilized mb would equal eight (8)).

- 6) Determine the comparison t value (t_c) from table 1 using:

- a) 0.05 level of significance
- b) $mb-1$ as the degrees of freedom
- c) values from the one-tailed column (for pH use the two-tailed values)

7) If the absolute value of t^* is $> t_c$ then the permittee must conclude that a statistically significant change has occurred.

Table 1
Standard T-Tables 0.05 Level of Significance

Degrees of freedom	t-values (one-tail)	t-values (two tail)
1	6.314	12.706
2	2.920	4.303
3	2.353	3.182
4	2.132	2.776
5	2.015	2.571
6	1.943	2.447
7	1.895	2.365
8	1.860	2.306
9	1.833	2.262
10	1.812	2.228
11	1.796	2.201
12	1.782	2.179
13	1.771	2.160
14	1.761	2.145
15	1.753	2.131
16	1.746	2.120
17	1.740	2.110
18	1.734	2.101
19	1.729	2.093
20	1.725	2.086
21	1.721	2.080
22	1.717	2.074
23	1.714	2.069
24	1.711	2.064
25	1.708	2.060
30	1.697	2.042
40	1.684	2.021

Adopted from Table III of "Statistical Tables for Biological Agricultural and Medical Research" (1947. R.A. Fisher and F. Yates)

ATTACHMENT E

CLOSURE AND POST-CLOSURE COST ESTIMATES

1438120003 – Peoria County

Peoria Disposal Company

ILD000805812

CLOSURE AND POST-CLOSURE COST ESTIMATES

1. The approved closure cost estimate is \$616,812 as indicated in Appendix I-2 of the approved permit application. This cost estimate in 2017 dollars is broken down as follows:

Hazardous Waste Management Unit	Estimated Closure Cost (in 2017 dollars)
Containers	\$30,673
Tank Systems	
Tank T-4	\$24,355
Hydraulic stabilization mixer	\$ 4,143
Runoff Retention Basin	\$359,640
Containment Building	\$198,010
Landfill	0
Totals	\$616,812

2. The approved post-closure cost estimate at the time of issuance of this renewed RCRA permit is \$3,342,258 (in 2019 dollars) as provided in Appendix I-8 of the approved permit application which has been adjusted for inflation. These estimates must be used when establishing financial assurance in accordance with 35 Ill. Adm. Code 724, Subpart G. However, the post-closure cost estimate must be updated in accordance with Condition X.B.1 to maintain thirty (30) years of post-closure care until a certification of post-closure care is accepted by the Illinois EPA.

ATTACHMENT F

CERTIFICATION DOCUMENTATION FOR CONSTRUCTION

1438120003 – Peoria County

Peoria Disposal Company

ILD000805812

CERTIFICATION DOCUMENTATION FOR CONSTRUCTION

When submitting certifications required by this RCRA permit for construction of any new unit, please complete the attached certification form. One (1) original submittal and form with "wet" signatures and two (2) copies of the submittal must be provided to the Illinois EPA. This will help to ensure that the submittal reaches its proper destination, and the certification will meet the regulatory requirements. Sending one of the two copies directly to the Illinois EPA's Field Operations Section (FOS) is acceptable if all copies have a completed form attached and the facility advises the Illinois EPA Permit Section, in writing, that a copy has been sent to FOS.

A documentation report and as-built drawings (sealed and signed by a qualified Illinois licensed Professional Engineer) must be included with this certification. Information necessary to document the construction of the unit and to support the certification must be contained within the report. This report should include a thorough description of all construction data and drawings and should be formatted in a logical and orderly manner. The construction documentation report must contain at least the following items:

1. An introduction and summary which describes the scope and purpose of the project;
2. A description of all construction activities, including quality assurance and quality control;
3. As-built drawings of unit and a description of any deviations from the plans and specifications approved in the permit;
4. A description of the test methods used and justification for any deviations from standard test methods;
5. A summary of test results, identification of any samples which did not meet the specifications and the corrective action and retesting which was undertaken in response to any failing test results;
6. Any necessary information associated with construction of the unit to document that construction was in accordance with the plans and specifications approved by the permit;
7. Information specifically required by the permit; and
8. Any available photographs of the unit.

CONSTRUCTION CERTIFICATION

This statement is to be completed by both the owner/operator and the qualified Illinois licensed professional engineer upon completion of construction in accordance with 35 Ill. Adm. Code Section 702.126. Submit one copy of the certification with original signatures and two additional copies. Forward these certification statements and any information required by the permit to the following address:

Illinois Environmental Protection Illinois EPA
Bureau of Land, Permit Section #33
1021 North Grand Avenue East
Springfield, Illinois 62702

FACILITY NAME: Peoria Disposal Company
IEPA's SITE CODE: LPC No. 14381320003
U.S. EPA ID NO.: ILD000805812
PART B PERMIT LOG NO. B-24R2
PERMIT (OR MODIFICATION) ISSUANCE DATE:
PERMIT CONDITION NO. REQUIRING CERTIFICATION:

The _____ has been constructed in accordance with the specifications in the Permit. Documentation that the construction was in accordance with the permit is contained in the enclosed report. I certify under penalty of law that this document and all attachments were prepared under my direction of 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.

Facility Name

Printed Name of Responsible Officer

Signature of Owner/Operator Date
Responsible Officer

Printed Title of Responsible Officer

Signature of Licensed P.E. Date

**Printed Name of Licensed P.E. and
Illinois License Number**

Mailing Address of P.E.:

Licensed P.E.'s Seal:

ATTACHMENT G

OVERVIEW OF RCRA CORRECTIVE ACTION ACTIVITIES

1438120003 – Peoria County

Peoria Disposal Company

ILD000805812

Overview of RCRA Corrective Action Activities

1.0 Introduction

This attachment documents the history of RCRA corrective action activities completed to date at the Peoria Disposal Company (PDC) (a subsidiary of GFL Environmental) facility near Peoria, Illinois. These activities have been completed with the oversight from both USEPA and the Illinois EPA. There is a figure at the end of this document which depicts the location of the solid waste management units (SWMUs) and other areas of concern at the facility evaluated during this corrective action program.

2.0 Brief Chronology of Initial Corrective Action Activities at Facility

The following is a brief chronological history of the initial corrective action activities at the Peoria Disposal Company facility:

1. On July 11, 1985 the USEPA received the Certification of Solid Waste Management Units submitted by PDC
2. On November 15, 1985 the USEPA completed the Facility Management Plan and the RCRA Facility Assessment.
3. On September 30, 1987, the Illinois EPA and USEPA issued a joint final RCRA permit to Peoria Disposal Company for treatment, storage, and/or disposal in containers, tanks, waste piles, surface impoundments, and landfills. Among other things, the USEPA portion of the permit required the facility to conduct corrective action, as appropriate, on one SWMU—the Pre-RCRA Closed Landfill.

3.0 Brief Description of SWMUs

A SWMU known as the Pre-RCRA Landfill was addressed under the corrective action provisions of the original RCRA permit issued to the facility in 1987. In addition, two additional releases were reported to USEPA in 1991 and 1995. These releases were also addressed under provisions of the facility's RCRA permit. A more detailed discussion of this SWMU and these two releases is provided in Sections 3.1 thru 3.3 below.

3.1 Pre-RCRA Landfill

The Pre-RCRA landfill is a closed landfill owned and operated by Peoria Disposal Company from its inception as a landfill. The unit was operated as a municipal waste landfill serving the City of Peoria and the Peoria County area. Operations began in 1968, under the regulatory jurisdiction of the Peoria County Health Department. In 1974, an operating permit (1974-36-OP) was issued by the Illinois EPA to the facility to manage municipal refuse, excluding liquid or hazardous waste unless authorized by supplemental permit. An additional permit (1978-2564) was issued which allowed for landfilling operations and identified closure materials to be used.

Operations were completed in January 1980. The site then was covered and closed in accordance to permit requirements. The plat of survey of the closed facility was recorded in accordance with the requirements of the State of Illinois in October 1980. The site was monitored for the required three (3) year period.

PDC completed an RFI for this unit and on June 27, 1991, USEPA determined that corrective action was complete at this unit.

3.2 Groundwater Contamination at Well G140 Discovered in June 1991.

On July 12, 1991, PDC sent a letter to the Illinois EPA indicating that an apparent statistically significant increase above background for 1,1-dichloroethane had been observed in groundwater samples from monitoring well G140 (a well which must be monitored as part of the groundwater monitoring program set forth in the facility's RCRA permit). In addition, on August 7, 1991, PDC sent a letter to USEPA indicating that low level of vinyl chloride (8.7 ug/l) and 1,1-dichloroethane (15ug/l) were detected in groundwater samples collected from well G140.

PDC conducted an investigation to determine the source of the detected contamination and monitored the groundwater quality in well G140 on a monthly basis for more than one (1) year. Vinyl chloride was not detected in any of these subsequent monitoring efforts and vinyl chloride was not detected above the PQL of concern as set forth in the facility's RCRA permit. As such, it was determined that no release had occurred and that PDC should revert back to quarterly monitoring at well G140 in accordance with their RCRA permit.

3.3 June 1995 Surface Release from Pre-RCRA Landfill

On June 2, 1995, a leachate seep was observed at the Pre-RCRA landfill. This seep was found to be originating from an erosion gully on the landfill which had penetrated the soil cover over the landfill. PDC took action to prevent the flow of any leachate from the site and also took action to fill in and repair the eroded area.

The Illinois EPA inspected this area on June 2, 1995. PDC notified USEPA of this release in a July 5, 1995 letter. Based upon a review of available information, it appears PDC adequately addressed this release.

ATTACHMENT H
CLOSURE CERTIFICATION STATEMENT

1438120003 – Peoria County

Peoria Disposal Company

ILD000805812

CERTIFICATION OF COMPLETION OF RCRA CLOSURE

Peoria Disposal Company (1438120003) – Peoria County

USEPA ID: ILD000805812

RCRA Closure Log No. B-24R2

To meet the requirements of 35 Ill. Adm. Code 724.215, this statement is to be completed by both a responsible officer of the owner/operator (as defined in 35 Ill. Adm. Code 702.126) and by a qualified Illinois licensed professional engineer upon completion of closure of the _____. Submit one copy of the certification with original signatures and two additional copies.

The hazardous waste management unit, known as the _____, at Peoria Disposal Company has been closed in accordance with the specifications in the approved closure plan. A report documenting that closure has been carried out in accordance with the approved closure plan is attached.

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.

A person who knowingly makes a false, fictitious, or fraudulent material statement, orally or in writing, to the Illinois EPA commits a Class 4 felony. A second or subsequent offense after conviction is a Class 3 felony. (415 ILCS5/44(h))

Facility Name

Printed Name of Responsible Officer

Signature of Owner/Operator **Date**
Responsible Officer

Printed Title of Responsible Officer

Signature of Licensed P.E. **Date**

Printed Name of Licensed P.E. and Illinois License Number

Mailing Address of P.E.:

Licensed P.E.'s Seal:

ATTACHMENT I

FACILITY DIAGRAM

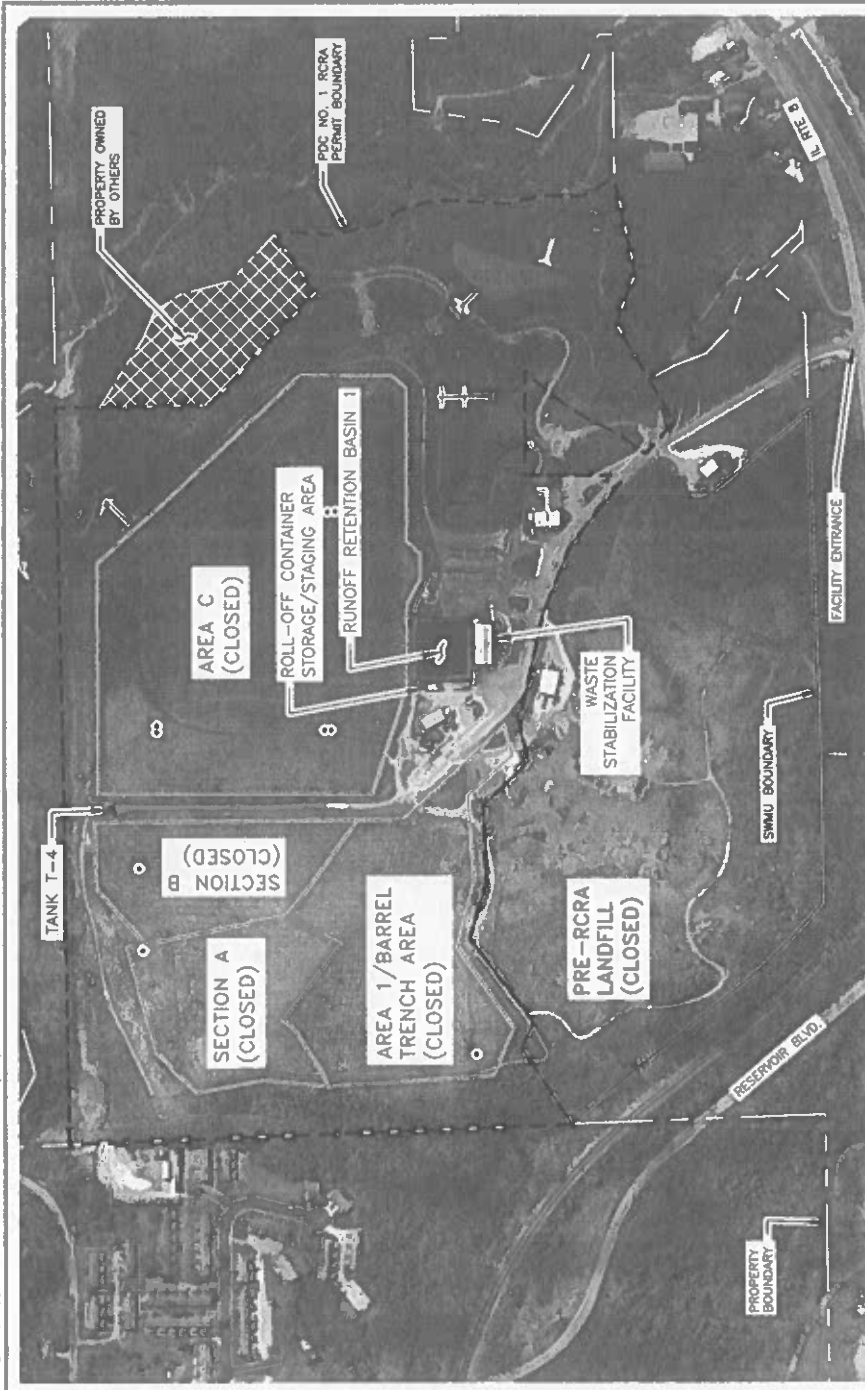
1438120003 – Peoria County

Peoria Disposal Company

ILD000805812

FACILITY DIAGRAM

NAME: MICHAEL CAMERON PLOTTED ON: 11/28/2023 10:54 AM FILE PATH: D:\AutoCAD backup 1-27-22\Landfills\91-143-PDC #1\LANDFILL STATUS FIGURES\91143599.dwg



NOTES:

1. UNITS DENOTED IN GREEN HAVE BEEN CLOSED AS OF DECEMBER 1, 2023.
2. UNITS DENOTED IN RED HAVE NOT BEEN CLOSED AS OF DECEMBER 1 2023.
3. COMPOSITE PHOTOGRAPH PRODUCED BY CLOUDPOINT GEOGRAPHICS FROM IMAGES ACQUIRED 4-18-2017.

GFL Environmental, Inc.



Peoria, Illinois

FIGURE 1

PDC NO. 1 FACILITY
RCRA WASTE MANAGEMENT UNITS
GFL ENVIRONMENTAL, INC.
PEORIA, ILLINOIS
PROJECT NO. 91-0143

ATTACHMENT J
APPROVED PERMIT APPLICATION

1438120003 – Peoria County

Peoria Disposal Company

ILD000805812

APPROVED PERMIT APPLICATION

This permit is based on the information in the approved permit application. The approved permit application consists of the following documents:

<u>Document</u>	<u>Date</u>	<u>Date Received</u>
RCRA Permit Application (Second Renewal)	August 3, 2017	August 4, 2017
Response to completeness review	November 6, 2017	November 7, 2017
Additional Information	June 17, 2019	June 18, 2019

