ILLINOIS ENVIRONMENTAL PROTECTION AGENCY

2520 WEST ILES AVENUE, P.O. BOX 19276, SPRINGFIELD, ILLINOIS 62794-9276 · (217) 782-3397

JB PRITZKER, GOVERNOR JAMES JENNINGS, ACTING DIRECTOR

217/524-3301

CERTIFIED MAIL
RETURN RECEIPT REQUESTED

JUL 24 2025

9589 0710 5270 0389 7035 68

Republic Services Co.
Attn: Matthew R. Healy
9813 Flying Cloud Drive
Eden Prairie, MN 55347

GFL Environmental, Inc.
Attn: Mike Stoeckigt
2124 Kohler Memorial Drive
Sheboygan, WI 53081

Re: 0978020001 -- Lake County
Zion Site 1 Phase A Landfill
ILD980700728
Log No. B-23R2
RCRA Permits Administrative Record – 24D
Permit Draft

Dear Mr. Healy and Mr. Stoeckigt:

Attached is a draft renewed Resource Conservation and Recovery Act (RCRA) Hazardous Waste Management Post-Closure 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 IAC) 705.144.

Under the provisions of 35 IAC 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 Zion-Benton Public Library located at 2400 Gabriel Avenue, Zion, Illinois 60099. 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 8, 2025.

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:

Jeff Guy, Office of Community Relations (#5)
Illinois Environmental Protection Agency
2520 West Iles Avenue
Post Office Box 19276
Springfield, Illinois 62794-9276

The Illinois EPA will issue a final renewed RCRA Post-Closure 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 IAC 705.212.

Any questions concerning this draft permit, please contact Kelly Huser at 217/524-3867 or kelly.huser@illinois.gov. Any groundwater specific questions, please contact Shawntay Dial at 217/558-0177 or shawntay.dial@illinois.gov.

Sincerely,

Joshua L. Rhoades, P.G.
Permit Section Manager
Bureau of Land

JLR: KDH:0978020001-RCRA-B23R2-Draft.docx
KDH SDD TNH AMB
Attachments: Fact Sheet
Draft Renewed RCRA Post-Closure Permit

cc: Jim Hitzeroth, BFI Waste Systems of North America, LLC
Brad Stenzel, GFL Environmental, Inc.
Ed Doyle, P.E., Environmental Information Logistics, LLC

FACT SHEET
Draft Renewed RCRA Hazardous Waste Management Post-Closure Permit
Zion Site 1 Phase A Landfill
701 North Green Bay Road
Zion, Illinois
Illinois EPA ID No. 0978020001
USEPA ID No. ILD980700728
Log No. B-23R2

1.0 INTRODUCTION/PURPOSE

The Illinois EPA has prepared a draft renewed Resource Conservation and Recovery Act (RCRA) hazardous waste management post-closure permit (draft permit) for public comment which requires BFI Waste Systems of North America, LLC to continue providing post-closure care for a closed 40-acre landfill located at the Zion Site 1 Landfill facility in Zion, Illinois. The closed landfill, referred to as Zion Site 1 Phase A Landfill (Phase A landfill) received mainly non-hazardous waste, but some hazardous waste was also accepted.

This fact sheet has been prepared pursuant to the requirements of Title 35 Illinois Administrative Code (35 IAC) 705.143 and is intended to be a brief summary of the principal facts and significant factual, legal, methodological, and policy questions considered in preparing a draft permit for the above-mentioned facility. The Illinois EPA initially issued this facility a RCRA permit in 1988 and has modified it several times since that date. BFI has been operating the facility under the terms and conditions of these permits and is presently operating it under the provisions of its current RCRA permit.

2.0 FACILITY LOCATION

The Zion Site 1 Landfill facility is located within a 290-acre parcel of land whose address is 701 North Green Bay Road, Zion, Illinois. The 290-acre parcel of land lies between North Green Bay Road and North Kenosha Road and is located just north of 9th Street. The Zion Site 1 Landfill facility is located on the western 59 acres of this larger parcel of the land. A facility map is provided at the end of this fact sheet.

3.0 FACILITY OWNER AND OPERATOR

The owner of the closed 40-acre Phase A landfill and the 290-acre Zion Site 1 Landfill site on which the facility is located is:

Zion Landfill, Inc.
701 North Green Bay Road
Zion, Illinois 60099

The operator of the closed 40-acre Phase A landfill, and the entity responsible for carrying out post-closure care of the landfill is:

BFI Waste Systems of North America, LLC
26 W 580 Shick Road
Hanover Park, Illinois 60133

4.0 FACILITY BACKGROUND

On October 30, 1976, Illinois EPA issued Browning-Ferris Industries (BFI) a state permit to operate a 59-acre solid waste disposal site at the location now known as Zion Landfill Site 1 (Permit No.1976-53-OP). BFI disposed of waste in a portion of the overall permitted facility approximately 40 acres in size under the terms and conditions of that permit until November 1980, at which time the regulations governing the management of hazardous wastes came into effect. This landfill, approximately 40 acres in size, is the closed Phase A landfill which is the subject of this draft permit.

After November 1980 and until May 1988, the Phase A landfill was operated in accordance with state permit mentioned above (and associated supplemental permits) and the hazardous waste interim status regulations. On April 5, 1988, Illinois EPA issued this facility a RCRA Permit which set forth detailed requirements for the management of hazardous wastes at this facility.

During the time that BFI operated the Phase A landfill, mainly non-hazardous waste was disposed in it, but some hazardous waste was also disposed there. BFI ceased disposing of hazardous waste in the Phase A landfill in 1990; it did however continue to dispose of non-hazardous waste there until 1993. Closure activities of the Phase A landfill were completed in 1997 and on February 10, 1998, BFI certified completion of closure of the Phase A landfill.

Ten acres of the initially permitted Zion Landfill Site 1 were re-permitted by the Illinois EPA for the disposal of only non-hazardous waste on June 24, 1994 (Permit No. 1992-328-LFM). This portion of the facility came to be known as Zion Landfill Site 1, Phase B (Phase B landfill), which is <u>not</u> part of this draft permit. This landfilling operation occurred in two cells: Cell 1, consisting of approximately 4.9 acres and Cell 2, consisting of approximately 4.7 acres. Non-hazardous waste was disposed in these units from 1994 until 1996.

Closure activities for both cells were completed in 1998, and the Illinois EPA approved the certification of closure of these units on August 28, 1998.

The remaining 9.4 acres of the originally permitted 59-acre facility house ancillary equipment and structures associated with the Site 1, Phase A and B landfills. Leachate and landfill gas management systems have been installed in Phase A and Phase B and the following equipment/structures associated with these systems are located in this area:

1. The tanks and associated loading areas used to accumulate the collected leachate before it is sent off-site for treatment; and

2. The blowers and the flare associated with the gas management system at the facility.

The area to the east of the Phase A landfill is a permitted operating non-hazardous waste landfill currently owned and operated by GFL Environmental, Inc. (Permit No. 1976-7-DE and 1976-7-OP; Supplemental Permit No. 2022-034-SP). This facility is not part of this draft permit. The landfill is referred to as Site 2.

Zion Landfill, Inc. is the entity that owns the Zion Landfill Site 1, however, as the operator, BFI has retained the post-closure care responsibilities for the Phase A landfill (RCRA unit).

5.0 OVERVIEW OF DRAFT RENEWED RCRA PERMIT

The Phase A landfill addressed in this draft permit is approximately 40 acres in size and is trapezoidal in shape (it is approximately 2,450 feet (ft) long from north to south, approximately 630 ft wide along its northern boundary and 740 ft wide along its southern boundary).

As indicated above, the Phase A landfill has been receiving post-closure care in accordance with the requirements of a RCRA permit previously issued for this facility by the Illinois EPA. This draft permit contains updated post-closure care requirements which must be carried out at the closed Phase A landfill until at least February 9, 2028.

The main components of post-closure care of a closed landfill are: (1) inspecting and maintaining the integrity of the final cover constructed over the landfill; (2) proper operation of the gas and leachate management systems installed within the landfill and ancillary equipment of these systems; and (3) monitoring the groundwater around the closed landfill to ensure detection of any release of contaminants from the landfill and into the underlying groundwater. This draft permit also establishes a process for corrective action in case of a release of contaminants to groundwater.

5.1 INSPECTION AND MAINTENANCE OF THE LANDFILL'S FINAL COVER

The final cover system constructed on top of the waste at the Phase A landfill consists of the following components (listed from top to bottom):

1. A vegetative cover;

2. Six inches of topsoil which supports the vegetative cover;

3. A minimum of two ft thick protective soil layer;

4. A drainage layer; and

5. A minimum of two ft of compacted clay.

In addition, a 0.04-inch-thick Linear Low Density Polyethylene liner was placed on top of the compacted clay layer over the top portion of the landfill which is relatively flat (the area covered was approximately 18 acres in size).

The draft permit contains requirements for inspecting the final cover on a quarterly basis and properly maintaining it. Regular inspection and maintenance of the final cover should minimize: (1) the amount of rainwater which infiltrates into the landfill and produces leachate; and (2) releases of landfill gas directly from the landfill to the atmosphere.

5.2 LANDFILL GAS AND LEACHATE MANAGEMENT SYSTEMS

A total of 28 extraction wells have been installed within the closed Phase A landfill. Leachate and landfill gas can both be extracted from these wells via separate systems. The collected leachate flows to an accumulation tank before it is sent off-site for treatment. The collected landfill gas is directed to an on-site flare where it is burned. The draft permit contains requirements for the proper operation, maintenance, and monitoring of these systems to ensure they are effective.

5.3 GROUNDWATER MONITORING

There are two groundwater monitoring programs required by this draft permit. One to monitor the groundwater quality in the uppermost aquifer beneath the facility and one to monitor shallow groundwater in discontinuous sand and silt zones at the facility.

5.3.1 GROUNDWATER DETECTION MONITORING PROGRAM

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 IAC 724.198 must be implemented at the facility.

The Phase A landfill has 11 existing monitoring wells, which monitor the shallow drift aquifer (interglacial sands) at a depth of approximately 100 ft below ground surface.

5.3.2 SHALLOW ZONE OBSERVATION MONITORING PROGRAM

In addition to the Groundwater Detection Monitoring Program utilized to monitor the uppermost aquifer at the facility, the Phase A landfill has two existing wells to monitor groundwater in the shallow zone (discontinuous sand and silt lenses) at the facility. These groundwater monitoring wells are intended to detect any releases from the landfill to the shallow zone that could potentially impact the uppermost aquifer at the facility.

6.0 CONSIDERED PERMIT ACTIONS OTHER THAN RCRA

A. Clean Air Act

The air emissions from this facility are regulated under the Clean Air Act (CAA), the Illinois Environmental Protection Act (Act) and 35 IAC, Subtitle B: Air Pollution. Under these regulations, a permit is required to install or operate any process which is or may be a source of air pollutants.

1. Emissions from the landfill itself and from the flare used on occasion are regulated by Title V Operating Permit No. 97030064 issued by the Illinois EPA, Bureau of Air (BOA).

B. Clean Water Act

A discharge of any waste waters from this facility into the waters of the State, is required to have a National Pollutant Discharge Elimination System (NPDES) permit, issued by the Illinois EPA Bureau of Water (BOW) under Section 39(b) of the Act. The only water discharged to the waters of the State at this RCRA permitted facility is storm water runoff from the closed Phase A landfill. This water is discharged in accordance with NPDES Permit IL0067724 issued by Illinois EPA, BOW.

7.0 PROCEDURES FOR REACHING A FINAL DECISION

Pursuant to 35 IAC 705.162(a)(2), the public is given at least 45 days to review the application and draft permit and provide comments 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 25, 2025 the date of the first publication of the public notice in the newspaper of general circulation in the area. The comment period will end on September 8, 2025.

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

Zion-Benton Public Library
2400 Gabriel Avenue
Zion, Illinois 60099
(847) 872-4680

This administrative record contains the permit application, draft permit, fact sheet, and other supporting documents and correspondence submitted to the Illinois EPA. The administrative record is 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. Inspection of the administrative record must be scheduled in advance by contacting Mr. Jeff Guy 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 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 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:

Jeff Guy, Office of Community Relations #5
Illinois Environmental Protection Agency
2520 West Iles Avenue
P.O. Box 19276
Springfield, Illinois 62794-9276
(217) 785-8724

When the Illinois EPA makes a 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 35 days after service of notice of the decision or at a later date if stated in the permit unless the decision is appealed.


SITE ENTRANCE
SCALE HOUSE
SITE 1 PHASE A CELL NO. 1
SITE 1 PHASE A CELL NO. 2
SITE 1 PHASE A
SITE 2
LEGEND
FACILITY LAYOUT
ZION LANDFILL
Weaver Consultants Group

ILLINOIS ENVIRONMENTAL PROTECTION AGENCY

2520 WEST ILES AVENUE, P.O. BOX 19276, SPRINGFIELD, ILLINOIS 62794-9276 · (217) 782-3397

JB PRITZKER, GOVERNOR JAMES JENNINGS, ACTING DIRECTOR

RCRA HAZARDOUS WASTE MANAGEMENT POST-CLOSURE PERMIT

0978020001 -- Lake County
Zion Site 1 Phase A Landfill
ILD980700728
Log No. B-23R2
RCRA Permits Administrative Record – 24D

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

PERMITTEE/OPERATOR	OWNER	FACILITY LOCATION
BFI Waste Systems of North America, LLC	Zion Landfill, Inc.	701 Green Bay Road
Attn: James Hitzeroth	Attn: Brad Stenzel	Zion, Illinois 60099
26 W 580 Schick Road	701 Green Bay Road	
Hanover Park, Illinois 60103	Zion, Illinois 60099	

A RCRA post-closure permit is hereby granted to BFI Waste Systems of North America, LLC (BFI) as Operator and Permittee pursuant to Section 39(d) of the Illinois Environmental Protection Act (Act), and Title 35 Illinois Administrative Code (35 IAC) Subtitle G.

PERMITTED HAZARDOUS WASTE ACTIVITY

This Permit requires BFI to conduct the following hazardous waste activities in accordance with the approved permit application and conditions of this Permit:

1. **Post-Closure Care** of a closed landfill (D80)
2. **Groundwater Monitoring** Detection Monitoring
3. **Corrective Action** as necessary

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 IAC 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 B of this Permit and any subsequent amendments. Any inaccuracies found in this information may be grounds for the termination or modification of this Permit (see 35 IAC 702.186 and 702.187) and potential enforcement action (415 ILCS 5/44(h)).

DRAFT

Joshua L. Rhoades, P.G.
Permit Section Manager
Bureau of Land

JLR: KDH:0978020001-RCRA-B23R2-Draft.docx

RCRA HAZARDOUS WASTE MANAGEMENT
POST-CLOSURE PERMIT

Log No. B-23R2

Zion Site 1 Phase A Landfill

LPC No. 0978020001

USEPA ID No. ILD980700728

TABLE OF CONTENTS

ATTACHMENTS

SECTION I: GENERAL FACILITY DESCRIPTION

A. OWNER

The facility is owned by Zion Landfill, Inc., herein referred to as the "owner". (35 IAC 702.123 and 703.181)

Zion Landfill, Inc.
701 Green Bay Road
Zion, Illinois 60099

B. OPERATOR

The facility operator is BFI Wastes Systems of North America, LLC, herein referred to as the "Permittee". (35 IAC 702.121, 702.123, and 703.181)

BFI Waste Systems of North America, LLC
26 West 580 Schick Road
Hanover Park, Illinois 60103

C. LOCATION

1. Location of Facility

The Zion Site 1 Landfill facility is located in Lake County in Illinois. Zion Landfill, Inc. owns approximately 290 acres at this location with approximately 40 acres being used for the management of hazardous waste (Phase A landfill). The Zion Site 1 Landfill facility is located at:

Zion Site 1 Landfill
701 Green Bay Road
Zion, Illinois 60099

The facility contact is the Environmental Manager. They can be reached at 630/894-5001.

2. Facility Layout Maps

The general facility layout and location of the closed hazardous waste management unit, Phase A landfill, regulated by this Permit is shown in Attachment A.

D. DESCRIPTION OF HAZARDOUS WASTE MANAGEMENT ACTIVITIES

On October 30, 1976, Illinois issued Browning-Ferris Industries (BFI) a state permit to operate a 59-acre solid waste disposal site at the location now known as Zion Site 1 Landfill (Permit No.1976-53-OP); this facility is located at 701 Green Bay Road, Zion, Illinois. BFI disposed of waste in an approximately 40-acre portion of the overall

permitted facility under the terms and conditions of this permit until November 1980, at which time the regulations governing the management of hazardous wastes came into effect. After November 1980 and until April 1988, BFI operated this landfill in accordance with this state permit and associated supplemental permits) and the hazardous waste interim status regulations. On April 5, 1988, The Illinois EPA issued this facility a RCRA Permit which set forth detailed requirements for the management of hazardous wastes at this facility.

During the time that BFI operated the approximately 40-acre landfill, mainly non-hazardous waste was disposed in it, but some hazardous waste was also disposed there. BFI ceased disposing of hazardous waste in this unit in 1990; it did however continue to dispose of non-hazardous waste there until 1993. Closure activities of the Phase A landfill were completed in 1997 and on February 10, 1998, BFI certified completion of closure of this unit.

Ten acres of the initially permitted site were re-permitted by Illinois EPA for the disposal of only non-hazardous waste on June 24, 1994 (Permit No. 1992-328-LFM). The actual portions of this 10-acre parcel used for landfilling purposes were Cell 1 which consists of 4.9 acres and Cell 2 which consists of 4.7 acres. Non-hazardous waste was disposed in these units from 1994 until 1996. Closure activities for both cells were completed in 1998, and the Illinois EPA approved the certification of closure of these units on August 28, 1998. The post-closure care period of these units, to be carried out in accordance with the facility's permit, began on April 25, 1998. Closed Cells 1 and 2 are typically referred to as the Phase B landfill.

The remaining 9.4 acres of the originally permitted facility house ancillary equipment and structures associated with the Phase A and B landfills. Leachate and landfill gas management systems have been installed in the Phase A and Phase B landfills and the following equipment/structures associated with these systems are present in this area:

1. The tanks and associated loading areas used to accumulate the collected leachate before it is sent off-site for treatment; and

2. The blowers and flare associated with the gas management system at the facility.

In addition to the units mentioned above, BFI permitted a 74.38-acre solid waste disposal site on the land just east of Phase A landfill. The Illinois EPA issued the operating permit for this site on December 31, 1981 (Permit No. 1980-24-OP); this Permit only allowed for the disposal of non-hazardous waste at this site, known as Site 2. On March 21, 1997, the Illinois EPA issued a permit (1995-343-LFM) which allowed for an expansion of this landfill to the east and allowed for a vertical expansion over a portion of the initially permitted disposal area.

BFI was purchased by Allied Waste Systems in May 1999, and thus became a part of Allied Waste Systems. In May 2000, the three landfills discussed above (Phase A

landfill; Phase B landfill; and Site 2) were sold to Onyx. As part of this transaction, BFI retained the post-closure care responsibilities for the Phase A and Phase B landfills associated with Zion Site 1 Landfill while Onyx took over operation of the Site 2.

Onyx became a part of Veolia and Veolia sold its North American sites to Advanced Disposal Services. GFL Environmental, Inc. (GFL) acquired the site from Advanced Disposal Services in 2020-2021. Allied Waste Systems has become a part of Republic Services, Inc. BFI Waste Systems of North America, LLC, a subsidiary of Republic Services, Inc., is the operator of the Phase A landfill and is responsible for providing post-closure care of this landfill.

Zion Landfill, Inc., a subsidiary of GFL, is the owner of the Phase A and Phase B landfills and continues to own and operate Site 2. The facility boundary is approximately 318 acres. A map showing the layout of the three landfill areas within the parcel is provided in Attachment A to this Permit.

SECTION II: POST-CLOSURE

A. SUMMARY

The Illinois EPA initially issued a Permit to dispose of waste in the Phase A landfill on October 30, 1976 (Permit No. 1975-53-OP). The Phase A landfill is trapezoidal in nature; it is approximately 2450 feet (ft) long from north to south. Its northern boundary is approximately 630 ft wide while its southern boundary is approximately 740 ft wide. In total, the Phase A landfill covers approximately 40 acres.

While both hazardous and non-hazardous wastes were disposed in the Phase A landfill after it began operation in 1976, the majority of the waste disposed in the landfill is non-hazardous waste. Hazardous waste ceased to be disposed of in this landfill in 1990 and in 1993 the landfill ceased receiving non-hazardous waste. From 1982 to 1990 (the time period when accurate data was maintained), approximately 232,000 tons of hazardous waste were disposed in this landfill. Closure activities for the landfill were completed in 1997 and it was formally certified closed on February 10, 1998. The Permittee has been providing post-closure care of the Phase A landfill since that time.

A minimum of 10 ft of in-situ or recompacted clay was to be present along the sidewalls and beneath the bottom of the landfill. The bottom of the landfill slopes north to south from an elevation approximately 750 ft mean sea level (MSL) to an elevation of approximately 730 ft MSL. In general, the bottom of the landfill is between 10 ft and 20 ft below the initial grade of the area where the landfill is located.

A bentonite-soil slurry wall was constructed around the southern portions of the Phase A landfill in the late 1980s and keyed into low permeable soils located beneath the subsurface. This slurry wall is present, in part, along the southern boundary of the landfill and extends approximately 330 ft from the southeast corner of the landfill north along the landfill's eastern property boundary (the average depth of this portion of the slurry wall is 25 ft). The other portion of the slurry wall extends approximately 1400 ft north of the southwest corner of the landfill along the landfill's western boundary (the average depth of this portion of the slurry wall is 35 ft).

A separate permitted solid waste landfill is located directly east of the Phase A landfill (this second landfill is Site 2, owned and operated by GFL Environmental). A minimum of 10 ft of clay soil separates this second landfill from the Phase A landfill, both below grade and above grade. The final grades of these two landfills coincide along their intersection.

A leachate management system and a landfill gas management system have been installed in the closed Phase A landfill. Both systems use the same 28 wells to extract either leachate or landfill gas.

The collected leachate flows to an 8,000 gal above-ground tank where it is accumulated until it is shipped off-site by truck for treatment. The collected landfill gas is burned in an on-site flare.

B. UNIT IDENTIFICATION

1. The Permittee must provide post-closure care for the landfill, identified in the following table, and as described in the approved permit application, subject to the terms and conditions of this Permit:

Unit Designation	Approximate Capacity (cubic yards)	Approximate Surface Area (acres)
Phase A	165,714	40

2. The location and horizontal extents of the landfill is identified on the map in Appendix B-1 of the approved permit application and Attachment A. The bottom of the landfill is located at an elevation of approximately 750 ft MSL at the northern portion, sloping to 730 ft MSL at the southern end. The sidewalls were built at a 2:1 slope.

3. The bottom liner of the landfill is a 10-foot-thick in-situ clay.

4. The components of the final cover system consist of the following from bottom to top:

   a. A minimum of two ft of compacted clay;

   b. A 40-mil linear low-density polyethylene (LLDPE) geomembrane over the top of the landfill where the elevation ranges from approximately 790 ft MSL to 810 ft MSL (this area is approximately 450 ft (east/west) by 1770 ft (north/south) in size (approximately 18.3 acres); it begins approximately 100 ft south of the northern boundary of the landfill and is adjacent to eastern boundary of the Phase A landfill);

   c. A geocomposite drainage layer. On the top of the landfill, this layer consisted of a polypropylene drainage grid and a non-woven geotextile (the drainage grid was placed on top of the geomembrane). On the sideslopes of the landfill, this layer consisted of a polypropylene drainage grid emplaced between two non-woven geotextiles;

   d. A minimum of 2.5 ft of protective soil layer (the upper six inches of this layer is topsoil); and

   e. A vegetative layer.

5. A survey plat indicating the location and dimensions of the Phase A landfill 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 Phase A landfill in accordance with the applicable requirements in 35 IAC 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 IAC Subtitle G: Waste Disposal.

   c. The use of this area is restricted.

6. The Plat of Survey (PINs 03-12-200-016 and 04-07-200-013) was filed with the Lake County Recorder's Office in Waukegan, IL on January 9, 2012. The record data is File No. 6807285.

   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. Any material removed from the hazardous waste disposal units during future activities must be managed as a hazardous waste in accordance with 35 IAC Subtitle G: Waste Disposal;

   c. Use of the area is restricted; and

   d. A survey plat and record of the type, location, and quantity of waste material in the hazardous waste disposal unit was filed with the Illinois EPA and the County Recorder.

C. POST-CLOSURE CARE PERIOD

1. The post-closure care period for the closed Phase A landfill began February 10, 1998. Post-closure care of this landfill must continue until at least 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 Phase A landfill, as determined by the Illinois EPA.

2. On or prior to February 10, 2027 (one year before February 10, 2028), the Permittee must submit a Class 2 permit modification request to the Illinois EPA in accordance with 35 IAC 703.241(a)(2) and 35 IAC 703, Appendix A, E.2, to extend the post-closure care of the Phase A landfill for an additional 30-year period or until such time as no unacceptable risks to human health and the environment are present in the Phase A landfill, as determined by Illinois EPA, as specified in Condition II.C.1.

3. The Illinois EPA may include restrictions upon the future use of the site if necessary to protect human health and the environment, including permanent prohibition of the use of the site for purposes which create an unreasonable risk 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 Recorder of the county in which the hazardous waste disposal site is located.

4. The Permittee must not allow the property where the Phase A landfill identified in Condition II.B.1 is located to be used in a way that could disturb the integrity of the final cover, berms or any other components associated with the closed landfill or the function of the facility's monitoring system, unless the Illinois EPA determines, by way of a permit modification, that such use is necessary for either of the following reasons:

   a. Is necessary for the proposed use of the property and will not increase the potential hazard to human health or the environment; or

   b. Is necessary to reduce a threat to human health or the environment.

D. INSPECTIONS

1. The Permittee must inspect the final cover, berms, and drainage structures of the closed Phase A landfill on a quarterly basis in accordance with the procedures in Section D.3 of the approved permit application as modified by this Permit. The results of each inspection must be documented in the facility's operating record. The general inspection schedule for the Phase A landfill is provided in Attachment C.

2. The Permittee must inspect the closed Phase A landfill at least quarterly and within 72 hours of any rainfall event of three or more inches in a 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 system.

3. Appropriate corrective action must 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 must be reinspected one 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 must be documented in the facility's operating record and maintained for the entire post-closure care period.

5. The Permittee must maintain the integrity and effectiveness of the final cover, berms, and drainage structures of the Phase A landfill. This includes making repairs as necessary to correct the effects of settling, subsidence, erosion, etc. Corrective action must be taken if any problem listed below is encountered when inspecting the final cover, berms, and drainage structures of the landfill:

   a. Cracks greater than one inch wide in the final cover or berms, rills, gullies, and crevices greater than six inches deep;

   b. Depressions (ponds) and holes in the final cover;

   c. Eroded or scoured drainage channels;

   d. Little or no vegetation is present in an area in excess of 100 square ft in size;

   e. Gas and/or odor problems;

   f. Growth of vegetation with taproots;

   g. Vectors; and

   h. Leachate popouts or seeps.

6. Appropriate follow-up inspections must be conducted to verify the corrective action taken adequately addresses the observed problem. In addition, the corrective action taken, and results of all follow-up inspections must be documented in the facility's operating record.

7. The Permittee must protect and maintain the surveyed benchmarks present at or near the closed Phase A landfill.

8. The Permittee must place additional warning signs (DANGER -UNAUTHORIZED PERSONNEL KEEP OUT) around the closed Phase A landfill as necessary such that one is clearly legible at any point near the perimeter of the landfill.

E. OPERATION OF THE LEACHATE AND GAS MANAGEMENT SYSTEMS

1. A landfill gas extraction/management system was installed within the closed Phase A landfill in 1997. This system currently consists of a blower, 28 vertical extraction wells located throughout the Phase A landfill, piping required to carry the extracted gas to a treatment unit and equipment to treat/burn the extracted landfill gas.

2. In 1998, modifications were made to the gas extraction wells mentioned above so that they could also be used to remove leachate from the landfill (i.e., submersible pumps and associated piping were placed in each of the wells). Additional piping, etc. was installed during this effort so that the extracted leachate could be routed to an above-ground tank where it is accumulated before being sent off-site for treatment.

3. Several minor modifications have been made to the leachate and landfill gas management since they were first installed. A drawing showing the current layout of these systems is provided in Appendix E-13 of the approved permit application.

4. One of the aspects of the leachate and landfill gas management systems for the Phase A landfill is the interval over which each extraction well is screened. A tabular summary of this information is as follows (* = no leachate extraction pump present in the well; the well is only for removal of landfill gas):

Extraction Well No.	Surface Elevation (Ft-MSL)	Approximate Screened Interval (Ft-MSL)
EW-1	789.3	750.4-774.3
EW-2	802.5	748.4-781.2
EW-3	807.3	747.6-780.3
EW-4*	789.0	750.9-773.7
EW-6*	797.3	749.3-781.2
EW-7*	799.1	747.5-780.5
EW-8	798.0	747.8-784.8
EW-9	795.2	746.8-780.8
EW-10	812.4	747.2-788.2
EW-11	799.0	746.3-780.5
EW-12	797.1	746.5-783.6
EW-12A	787.1	751.2-776.5

Extraction Well No.	Surface Elevation (Ft-MSL)	Approximate Screened Interval (Ft-MSL)
EW-13	811.4	744.7-788.7
EW-14	795.0	744.8-780.0
EW-15	791.7	743.1-777.1
EW-16	809.0	745.0-787.5
EW-17	782.5	742.7-767.2
EW-18	801.2	741.8-779.8
EW-19	776.7	740.6-760.4
EW-20	771.6	739.9-753.9
EW-21	763.5	740.0-749.3
EW-22	767.8	739.3-750.4
EW-23*	766.4	740.5-750.5
EW-24	777.7	740.0-762.0
EW-25	785.9	741.2-770.0
EW-26	783.2	739.4-768.2
EW-27	804.6	741.8-783.8
EW-28	809.7	744.5-789.0

6. The leachate and gas management systems at the Phase A landfill must be operated, monitored, maintained, and inspected in accordance with the procedures of this Permit and Sections E.3 and E.5 of the approved permit application. Additional requirements associated with these systems are set forth in Conditions II.F, II.G, and II.H.

F. LANDFILL GAS MONITORING PROGRAM

The landfill gas monitoring program to be implemented for the closed Phase A landfill is set forth in Appendix E-20 of the approved permit application subject to the following conditions and modifications:

1. The five perimeter gas monitoring probes and four ambient air locations (three down-wind and one up-wind) must be sampled on an annual basis and the samples analyzed for the following parameters:

a. Pressure (determined before collecting any samples);

b. Temperature;

c. Methane;

d. Oxygen; and

e. Carbon Dioxide.

2. All ambient air samples must be collected: (1) no more than one inch above the ground surface; and (2) within 100 ft of the leachate (or at the property boundary if it is closer).

3. During the annual monitoring required in Condition II.F.1, the presence of any malodors near the sample points and beyond the property boundary must be noted in the field notes for the sampling effort. At a minimum, these notes must document that the presence of malodors was evaluated at each sampling location.

4. The steps described in Condition II.F.5 must be carried out if any of the following occur during the required annual landfill gas monitoring program:

   a. A methane concentration greater than 50% of the lower explosive limit in air is detected in any of the below ground monitoring devices outside the waste boundary;

   b. A methane concentration greater than 50% of the lower explosive limit in air is detected during ambient air monitoring;

   c. A methane concentration greater than 25% of the lower explosive limit in air is detected in any building on or near the facility; and

   d. Malodors attributed to the unit are detected beyond the property boundary.

5. If any of the items identified in Condition II.F.4 occur, the Permittee must:

   a. Take immediate action, as appropriate, to protect human health from the adverse conditions;

   b. Within two business days of the occurrence, notify the Illinois EPA in writing of the occurrence, including its location and a description of its nature (quantitatively if possible);

c. Monitor the gas probes and ambient air on a daily basis for the parameters set forth in Condition II.F.1. Appropriate action will have been taken when the results of the monitoring program are below all the criteria identified in Condition II.F.4 for five consecutive days;

d. Submit weekly reports documenting the action taken to correct the problem and summarizing all monitoring efforts carried out during the response period; and

e. If after 30 days, problems are still occurring, the Permittee must submit a Class 1* permit modification request which describes the changes which must be made at the landfill to remedy the problem. Until such time as the modification request is approved, the Permittee must still comply with the requirements of Conditions II.F.5.a through II.F.5.d.

6. At the end of the post-closure care period, the gas monitoring probes must be decommissioned. The probes outside the waste boundary must be decommissioned using Illinois EPA's groundwater monitoring well plugging procedures. In decommissioning probes within the waste boundary, the pipe must be cut off at least two ft below the compacted clay layer and plugged. The final cover in this area must then be reconstructed, as appropriate.

G. GAS MANAGEMENT SYSTEM

1. Except as modified in this permit, the landfill gas extraction system associated with the closed Phase A landfill must be operated, maintained, and inspected in accordance with Appendix E-21 of the approved permit application.

2. The Permittee must operate the landfill gas collection system installed in the closed Phase A landfill in such a manner that:

a. The criteria set forth in Condition II.F.4 are not exceeded; and

b. It is capable of removing landfill gas from the entire landfill.

3. The landfill gas collected from this facility is directed to a flare where it is burned.

4. The following measurements shall be made quarterly on the landfill gas flowing into the flare: flow rate, heat value, percent oxygen and percent carbon dioxide.

5. At a minimum, all equipment and appurtenances associated with the gas management system must be inspected and maintained, as necessary on a quarterly basis.

6. The Permittee must comply with the terms and conditions of their Title V Operating Permit No. 97030064 issued by Illinois EPA's Bureau of Air in regard to emissions from the landfill and from the flare used to burn collected landfill gas.

7. Condensate from the landfill gas extraction system must be managed as a listed hazardous waste (F039). Currently, this condensate is collected and discharged into the on-site leachate collection tank.

H. LEACHATE MANAGEMENT

1. The leachate pumps in the extraction wells identified in Condition II.E.5 are located approximately one foot above the bottom of the well. These pumps automatically turn on when the leachate level is approximately 3.5 ft above the bottom of the pump.

2. A manhole/sump is present just outside the southwest corner of the landfill which receives leachate from the original leachate collection trenches installed along the perimeter of the landfills base. The bottom of this sump is at an elevation of approximately 726 ft MSL. A pump similar to that described above is present in the sump and its intake is located approximately one foot above the bottom of the sump/manhole.

3. The level of leachate in each extraction well and the manhole/sump (relative to MSL) must be monitored on a quarterly basis.

4. The total amount of leachate removed from the site shall be determined on a quarterly basis. This determination must be made using the reported leachate loads removed from the tank each quarter. The counter devices associated with each extraction pump will be read on a quarterly basis to determine if the pumps are working.

5. A record of the date each load of leachate is sent off-site for treatment must be maintained in the operating record, as well as the volume shipped. In maintaining this record, adjustments must be made for the amount of gas condensate generated and transferred to the leachate accumulation tank.

6. Prior to shipping a load of leachate off-site for treatment, a sample must be collected and analyzed for:

   a. Five-day biological oxygen demand (BOD_5);

   b. Chemical Oxygen demand;

c. Total solids;

d. Total suspended solids;

e. Dissolved solids;

f. Total iron;

g. pH;

h. The groundwater monitoring constituents set forth in Lists G1 and G2 of Condition III.D.1 of this Permit;

i. Any other parameters deemed necessary by the facility receiving the leachate for treatment.

The results of this sampling/analysis effort must be documented in the facility's operating record.

7. A sample of leachate must be collected from an extraction well within the landfill annually and analyzed for the constituents set forth in 35 IAC 811, Appendix C.

   a. The four extraction wells EW-2, EW-6, EW-20, and EW-24 must be used for leachate sampling on a rotating basis.

   b. The following order must be used annually; (1st) EW-2; (2nd) EW-6; (3^{rd}) EW-20; (4^{th}) EW-24; and then it will start over.

   The results of this sampling/analysis effort must be documented in the facility's operating record and submitted electronically to the Illinois EPA.

8. Leachate sample analysis in Conditions II.H.6 and II.H.7 must be in accordance with the latest promulgated version of USEPA's "Test Methods for Evaluating Solid Wastes, Physical/Chemical Methods", Third Edition (SW-846) and finalized updates for the applicable analytical methods.

9. The Permittee must continue to operate the leachate collection and removal system throughout the post-closure care period until pumpable quantities of leachate are no longer present.

I. MONITORING, MAINTENANCE, AND RECORDKEEPING

1. The Permittee must keep and maintain a written operating record that includes all the records, reports, notifications, monitoring data, testing or analytical data, and corrective action data required by 35 IAC 724.173 and the conditions in this Permit,

for the entirety of the post-closure care period. The operating record must be maintained at this facility and be available for the Illinois EPA review.

2. The Permittee must comply with the requirements for landfills described in the approved permit application and the conditions of this Permit as follows:

   a. The Permittee must maintain the integrity and effectiveness of the final cover, berms, and drainage structures of the Phase A landfill. This includes making repairs as necessary to correct the effects of settling, subsidence, erosion, cracking or other events. Corrective action must be taken if any problem listed below is encountered when inspecting the final cover, berms, and drainage structures of the landfill:

      i. Cracks greater than one inch wide in the final cover or berms, rills, gullies, and crevices greater than six inches deep;

      ii. Depressions (ponds) and holes in the final cover;

      iii. Eroded or scoured drainage channels;

      iv. Little or no vegetation is present in an area in excess of 100 square ft in size;

      v. Gas and/or odor problems;

      vi. Growth of vegetation with taproots;

      vii. Vectors; and

      viii. Leachate popouts or seeps.

   b. Continue to operate the landfill leachate/gas 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 must 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 must 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. The Permittee must place additional warning signs (DANGER - UNAUTHORIZED PERSONNEL KEEP OUT) around the closed Phase A landfill as necessary such that one is clearly legible at any point near the perimeter of the landfill.

J. REPORTING AND NOTIFICATION REQUIREMENTS

1. By March 1st of each year, the Permittee must submit a report to the Illinois EPA which summarizes the post-closure care activities completed during the previous calendar year. This report should contain:

   a. Background information about the facility and a general discussion of the post-closure care activities carried out during the year;

   b. Dates quarterly inspections were conducted and copies of completed inspection checklists (these inspections include those required by Condition II.D.5);

   c. A general discussion of the observations from the quarterly inspections. Problems observed during the quarterly inspections must also be discussed and documentation must be provided regarding actions taken to correct the problem;

   c. A discussion of all maintenance activities carried out during the year, including mowing the vegetative cover over the landfill;

   d. The results of the landfill gas monitoring required by Condition II.F.2 and the action taken if any exceedances identified in Condition II.F.4 occur;

   e. Information regarding the landfill gas being sent to the flare as required by Condition II.G.3;

   g. Identification of any time periods when either the leachate or gas management systems were not operating or not operating properly; and

   h. Information regarding the leachate management program being carried out:

      i. The information required by Condition II.H.5 as it relates to the amount of leachate sent off-site throughout the year;

      ii. The amount of leachate removed from each leachate extraction well during the year as required by Condition II.H.4;

iii. The level of leachate observed each quarter in each leachate extraction well as required by Condition II.H.3; and

iv. The results of the analyses conducted on leachate as required by Conditions II.H.6 and II.H.7.

i. An evaluation of the data collected for the leachate and gas management programs at the facility to determine if they are operating effectively.

j. Recommended changes which should be made to the leachate or gas management units to increase their effectiveness in removing leachate or landfill gas from the landfill.

K. CONTACT INFORMATION/REQUIREMENTS

1. This Permit sets forth requirements which the Permittee must carry out at the facility whose address is:

   Zion Landfill Site 1
   701 North Green Bay Road
   Zion, Illinois 60099

2. The contact person for the operator, BFI Waste Systems of North America, LLC is:

   James W. Hitzeroth
   26 W. 850 Schick Road
   Hanover Park, Illinois 60133
   Telephone No.: 630/894-5001
   e-mail address: JHitzeroth@republicservices.com

3. The contact person for the owner, Zion Landfill, Inc. is:

   Brad Stenzel
   GFL Environmental, Inc.
   701 North Green Bay Road
   Zion, Illinois 60099-9564
   Telephone No.: 847/623-3870

4. A copy of this Permit and associated approved permit application must be maintained: (1) at this facility; and (2) by Mr. Hitzeroth.

5. Requests to change the contact persons identified above must be submitted as a Class 1 permit modification request to the Illinois EPA within five days after the change is made.

L. NOTICES AND CERTIFICATION

1. The Permittee must submit a request for permit modification to change any aspect of the approved post-closure plan, as modified by the conditions of this Permit. The request must be in accordance with the applicable requirements of 35 IAC Parts 702, 703, 705, and 724 and must include a copy of the amended post-closure plan for approval by the Illinois EPA. The request must be submitted at least 180 days prior to the date that the change is needed. Post-closure care of the landfill must be in accordance with the conditions of this Permit until such time as the proposed modification is properly incorporated into the facility's RCRA permit.

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 to this Permit in accordance with the applicable requirements in 35 IAC Parts 703, 705, and 724 must be submitted for the Illinois EPA's review and approval at least 180 days prior to the date they wish to remove the materials. The owner or operator must, at a minimum, demonstrate that the removal of hazardous wastes will satisfy the criteria of 35 IAC 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 must submit a proposed Environmental Covenant (EC) for the future land use and long-term management of the property on which the closed landfill unit is 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 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 the Illinois EPA.

4. If the Permittee seeks to end post-closure care, the Permittee must submit the following documents to the Illinois EPA Bureau of Land Permit Section by registered mail no later than 60 days after completion of the established post-closure care period for the closed Phase A landfill.

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 and 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 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 years after that. The facility must have complied with all requirements of 35 IAC Parts 620 and 724 in order to certify completion of post-closure care activities.

v. Colored photos of unit at post-closure completion. Photo documentation of the unit should include at least one 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 II.L.3 has been placed on the deed to the property on which the landfill area is located and has been filed with the County Recorder's Office.

5. The certification of completion of post-closure care shall not be approved by the Illinois EPA until the Permittee demonstrated that the EC required by Condition II.L.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 the unit in accordance with 35 IAC 724.220 and 724.245(i) within 60 days after receiving an approvable application and certifications from the owner and 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.

M. FINANCIAL ASSURANCE FOR POST-CLOSURE CARE

1. The Permittee must maintain financial assurance for post-closure care of the Phase A landfill of at least $4,571,652 (currently approved cost estimate in 2024 dollars) until such time as it is required to be modified pursuant to Condition V.D.3. This amount must be adjusted annually for inflation. Financial assurance meeting the requirements of 35 IAC 724, Subpart H must be maintained for post-closure care of the closed Phase A landfill.

2. Post-closure care costs are determined by multiplying annual costs by the full 30-year post-closure care period.

SECTION III: 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 IAC 724.198 must be implemented at the facility. Phase A of the Zion Site 1 Landfill has 11 existing monitoring wells which monitor the interglacial sand unit at a depth of approximately 100 feet (ft) below ground surface (bgs).

B. IMPLEMENTATION

1. The Permittee must implement the Groundwater 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.

   The Permittee shall carry out the detection monitoring specified in this Permit on the groundwater beneath Phase A of the Zion Site 1 Landfill facility in Zion, Illinois. The uppermost aquifer in the vicinity of the facility has been identified as interglacial sand deposits. For the purpose of this Permit and in accordance with the 35 IAC Part 620 regulations, the uppermost aquifer has been designated Class I: Potable Resource Groundwater. "Uppermost Aquifer" refers to the geologic formation nearest the natural ground surface that is an aquifer, as well as lower aquifers that are hydraulically connected with this aquifer in the vicinity of the facility.

2. 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 wells identified as the point of compliance wells in Condition III.C.1 and illustrated in Figure E-1 of the approved permit application.

C. WELL LOCATION AND CONSTRUCTION

1. The Permittee must install and maintain groundwater monitoring wells and piezometers at the locations specified in the table below to allow for the collection of groundwater samples and elevations from the shallow zone and uppermost aquifer. The locations of these wells are specified in Figure E-1 of the approved permit application.

IEPA Well No.	Facility Well No.	Well Depth (Ft-bgs)	Well Depth Elevation (Ft-MSL)	Well Screen Interval (Ft-MSL)	State Plane Coordinates (Northing/Easting)
Background Wells					
G121	G121	102.0	627.0	632.0-627.0	2118052.00N 1105338.00E
R123	R123	122.6	640.4	645.6-640.4	2120132.00N 1106426.00E
R136	R136	113.8	634.2	644.5-634.7	2118277.00N 1106162.00E
R127	R127	112.2	650.9	656.1-651.4	2118819.00N 1106043.00E
Point of Compliance Wells					
R124	R124	153.4	634.8	644.8-634.8	2119943.00N 1106905.00E
R126	R126	159.4	648.4	658.4-648.4	2119368.00N 1106907.00E
R128	R128	155.2	647.7	652.7-647.7	2119635.00N 1106903.00E
C129	C129	168.1	644.4	649.6-644.9	2119123.00N 1106905.00E
G131	G131	161.3	649.8	654.8-649.8	2118637.00N 1106910.00E
G132	G132	167.9	637.3	647.3-637.3	2118361.00N 1106904.00E
R133	R133	119.7	639.0	649.0-639.0	2117947.00N 1106954.00E

Note: "Ft-bgs" refers to feet below ground surface and "Ft-MSL" refers to feet above mean sea level

2. Construction of each monitoring well/piezometer must be in accordance with the "Monitoring Well Diagram" and "Well Completion Report" forms located on the Illinois EPA website, unless otherwise approved in writing by the Illinois EPA. All new monitoring wells/piezometers to be installed must be continuously sampled and logged on Illinois EPA boring logs contained in the "Field Boring Log" form on the Illinois EPA website, unless otherwise approved by the Illinois EPA.

3. The Permittee must notify the Illinois EPA within 30 days in writing if any of the wells identified in Condition III.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 must 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 must be provided within 10 feet of the existing well. This well must 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 the wells are replaced. A well which is more than 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 must submit boring logs, construction diagrams, and data sheets from installation and development of a new or replacement well to the Illinois EPA at the address below within 30 days of the date that installation of the well is completed. In addition, the Permittee must submit certification that plugging and abandonment of a well was carried out in accordance with the approved procedures to the Illinois EPA at the address below within 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
   2520 West Iles Avenue
   Post Office Box 19276
   Springfield, Illinois 62794-9276

6. All wells/piezometers shall be clearly identified and shall be equipped with protective caps and locks. Monitoring wells or piezometers located in high traffic areas must be protected with bumper guards or other alternate barriers.

7. All groundwater monitoring wells and piezometers not utilized in the approved groundwater monitoring system, but retained by the facility, must be constructed, and maintained in accordance with 77 IAC Part 920 regulations. Monitoring wells and piezometers that are improperly constructed must be abandoned in accordance with Condition III.C.3.

D. MONITORING PARAMETERS

1. The Permittee must determine groundwater quality at each groundwater monitoring well identified in Condition III.C.1, at both background and point of compliance locations, semi-annually during the active life (including closure and post-closure care period) of the landfill. Samples collected during the semi-annual and annual sampling events of each year must be analyzed for the field parameters and hazardous waste constituents below. Total (unfiltered) values must be used for comparison with background quality standards. Dissolved (filtered) must be used for statistical analysis.

List G1 – Semi-Annual Groundwater Sampling

Field Parameters	STORET Number	Reporting Units
pH *	00400	Standard Units
Specific Conductance **	00094	micromos/cm
Temperature of Water Sample	00011	(°F)
Turbidity	45626	Ntus
Depth to Water (below land surface)	72019	Ft
Depth to Water (below measuring point)	72109	Ft
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

Must be determined once every two or five years during the annual sampling event in accordance with Condition III.F.3.

Must be surveyed once every five years, or at the request of the Illinois EPA, or whenever the elevation changes as required by Condition III.F.2.

* Background Groundwater Quality values (BGQs) for pH in well G131 (8.45-10.23) and well G132(8.03-9.64).

** BGQs for specific Conductance in Well R126 (2495 micromos/cm).

SITE SPECIFIC CONSTIUTENT INFORMATION

Parameters	STORET Number	BGQs (ug/L)
Acetone	81552	100
Acrolein	34210	25
Acrylonitrile	34215	10
Benzene	34030	5
Bromodichloromethane	32101	5
Bromoform	32104	5
Bromomethane	34413	5
Carbon Tetrachloride	32102	5
Chlorobenzene	34301	5
Chloroethane	34311	10
2-Chloroethyl Vinyl Ether	34576	10
Chloroform	32106	5
Chloromethane	34418	10
1,1-Dichloroethane	34496	5
1,2-Dichloroethane	34531	5
1,1-Dichloroethene	34501	5
trans-1,2-Dichloroethene	34546	5
1,2-Dichloropropane	34541*	5
cis-1,3-Dichloropropene	34704	5
trans-1,3-Dichloropropene	34699	5
1,4-Dioxane	81582	120
Ethyl Benzene	78113	5
Isobutyl Alcohol	77033	100
Methylene Chloride	34423	5
Pyridine	77045	5
1,1,2,2-Tetrachloroethane	34516	5
Toluene	34010	5
1,1,1-Trichloroethane	34506	5
1,1,2-Trichloroethane	34511	5
Trichloroethene	39180	5
Vinyl Chloride	39175	2
1,2-Dichlorobenzene	34536	10
1,3-Dichlorobenzene	34566	10
1,4-Dichlorobenzene	34571	10
Hexachlorobutadiene	39702	10
Hexachloroethane	34396	10
Naphthalene	34696	10

Parameters	STORET Number	BGQs (ug/L)
Nitrobenzene	34447	10
1,2,4-Trichlorobenzene	34551	10

List G2 – Annual Groundwater Sampling

Parameters	STORET Number	BGQs (ug/L)
Barium (dissolved)	01005	1000
Barium (total)	01007	1000
Cadmium (dissolved)	01025	2
Cadmium (total)	01027	3
Chromium (dissolved)	01030	10
Chromium (total)	01034	10
Cyanide (dissolved)	00723	0.005
Cyanide (total)	00720	0.005
Lead (dissolved)	01049	5
Lead (total)	01051	5
Mercury (dissolved)	71890	0.2
Mercury (total)	71900	0.2
Nickel (dissolved)	01065	100
Nickel (total)	01067	100

Note: All constituents with "dissolved" labeled to the right must be determined using groundwater samples which have been filtered through a 0.45-micron filter and used for statistical purposes. All other parameters must be determined from unfiltered samples.

* = The STORET number and name previously used for 1,2-Dichloropropane was Dichloropropane (1,2) and STORET 31541.

2. The Permittee must establish background values in accordance with the procedures specified in the permit application as well as the following procedures:

   a. Background groundwater quality for a monitoring parameter or constituent must be based on data from four consecutive sampling events of the upgradient groundwater monitoring wells for two years.

   b. For those monitoring parameters or constituents not detected above the Lower Limit of Quantitation (LLOQ) during background gathering, the LLOQ must be the established background value.

3. Alternate concentration limits may be established where the Permittee can determine a constituent will not pose a substantial hazard to human health or the environment.

   a. Where a hazardous constituent has a standard in 35 IAC Part 620, the facility must apply for an adjusted standard as outlined in Section 28.1 of the Environmental Protection Act.

   b. For those hazardous constituents without a 35 IAC Part 620 standard, the alternative concentration limit(s) proposed by the facility must be approved by the Illinois EPA.

E. DETECTION MONITORING PROGRAM

1. The Permittee must determine groundwater quality at each monitoring well identified in Condition III.C.1 semi-annually and annually during the active life of the regulated unit (including the closure and post-closure care periods) for constituents found in Condition III.D.1. The Permittee must 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 must evaluate the results required by Condition III.E.1 and identify:

   a. The concentration of any constituent detected which was not detected in the previous sampling event. "Detected" shall mean a concentration equal to or above the LLOQ listed in the latest version of USEPA's "Test Methods for Evaluating Solid Wastes, Physical/Chemical Methods", Third Edition (SW-846) and finalized updates for the applicable analytical methods specified in the approved Sampling and Analysis Procedures, which are incorporated by reference in Condition III.G.1 of the Permit.

   b. The concentration of any constituent detected which exhibits a progressive increase over four sampling events. "Progressive Increase" shall mean an increase in the concentration of a constituent in successive sampling events.

3. The Permittee must 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 III.C.1

4. The Permittee must determine whether there is a statistically significant increase, (and/or decrease in the case of pH) over the background values established for each parameter identified in Condition III.D.1 each time groundwater quality is

determined at each well. In determining whether such a change has occurred, the Permittee must compare groundwater quality at each monitoring well identified in Condition III.C.1 to the background value derived in accordance with the statistical procedures specified in the permit application.

F. GROUNDWATER ELEVATION

1. The Permittee must determine the groundwater surface elevation referenced to MSL at each well each time groundwater is sampled in accordance with Condition III.I.3.

2. The Permittee must determine the surveyed elevation of "stick-up" referenced to MSL when the well is installed (with as-built diagrams) and every five years; or at the request of the Illinois EPA; or whenever the elevation changes in accordance with Condition III.I.5. "Stick-up" refers to the height of the referenced survey datum. This point is determined within ± 0.01 foot in relation to mean seal level, which in turn is established by referenced to an established National Geodetic Vertical Datum.

3. Elevation, as referenced to MSL, of the bottom of each monitoring well (STORET 72020), is to be reported once every five years, or whenever the pumps are removed from the well for maintenance; or at the request of the Illinois EPA; or whenever the elevation changes in accordance with Condition III.I.6. The mandatory measurement shall be taken during the annual sampling events.

G. SAMPLING AND ANALYTICAL PROCEDURES

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

   a. Samples must be collected by the techniques described in the approved permit application.

   b. Samples must be preserved and shipped (when shipped off-site for analysis) in accordance with the procedures specified in the approved permit application.

   c. Samples must be analyzed in accordance with the procedures specified in the approved permit application. Groundwater analysis must be in accordance with the most current version of the applicable methods found in USEPA's "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods," Third Edition (SW-846) and finalized updates.

d. Samples must be tracked and controlled using the chain-of-custody procedures specified in the permit application.

H. STATISTICAL PROCEDURES

When evaluating the monitoring results in accordance with Condition III.E, the Permittee must use the following procedure:

1. The statistical methods to be used must be as specified in Section C.6.7 of the permit application.

2. Analytical data must be compared to the parameter background values established in Condition III.D.1.

I. REPORTING AND RECORDKEEPING

1. The Permittee must enter all monitoring, testing, and analytical data obtained in accordance with Conditions III.D, III.E, III.F, III.G, and III.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 tests that the Illinois EPA has determined to be equivalent.

2. Samples collected to meet the requirements of the groundwater monitoring program described in Conditions III.D, III.E, III.F and III.H must be collected and reported, as identified in the included table. All additional information required by the groundwater monitoring program (as specified in Conditions III.D, III.E, III.F, III.H) must also be submitted to the Illinois EPA at the address listed in Condition III.C.5 in accordance with this schedule.

Samples to be Collected During The Months of	Results Submitted to the Illinois EPA by the Following	Parameters
April – May	July 15	List G1 and G2
October – November	January 15	List G1

3. Groundwater surface elevation data measured pursuant to Condition III.F.1 must be collected semi-annually and submitted to the Illinois EPA according to the schedule in Condition III.I.2.

4. The Permittee must report the groundwater flow rate and direction in the uppermost aquifer as required by Condition III.E.2 during the annual sampling event of the year.

5. The Permittee must report the surveyed elevation, as required by Condition III.F.2, of the top of the well casing "stick-up", referenced to MSL in accordance with the following schedule:

   a. For wells identified in Condition III.C.1, every five years (during the 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 must be made every five years (during the annual sampling event), or at the request of the Illinois EPA, or whenever the elevation changes.

6. Elevation of the bottom of each monitoring well identified in Condition III.C.1, as referenced to MSL, is to be reported at least annually. This measurement must be taken during the annual sampling event (STORET 72020) in accordance with Condition III.F.3.

7. Information required by Conditions III.I.2, III.I.3, III.I.5 and III.I.6 must be submitted in an electronic format. The information is to be submitted, as fixed-width text files formatted as found in the form, "Formatting Requirements for the 01 (and 02) Record of the Electronically Submitted Groundwater and Leachate Data" (LPC 160) located on the Illinois EPA webpage titled, "Electronic Reporting of Groundwater Data," and in accordance with the schedule found in Condition III.I.2. Additional guidance regarding the submittal of the information in an electronic format can be found on the Illinois EPA website.

8. The Permittee must submit a completed "RCRA Facility Groundwater, Leachate and Gas Reporting Form" (LPC-592) as a cover sheet for any notices or reports required by this Permit for identification purposes. Only one copy of the LPC-592 with wet signatures must accompany the submittal. However, the Permittee must submit one original copy of each notice or report submitted to the Illinois EPA in paper format and (excluding the groundwater and leachate monitoring results submitted in an electronic format) a minimum of two copies of each notice or report (one addressed to the Bureau of Land Permit Section, and one addressed to the regional Field Operation Section). The Form is not to be used for permit modification requests.

9. The Permittee must 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 III.E.4, that there is a statistically significant change for any of the parameters specified in Condition III.D.1 at any monitoring well at the compliance point, the Permittee must:

a. Notify the Illinois EPA in writing indicating which parameters and wells have shown statistically significant increases and provide all statistical calculations. This notification must be submitted to the Illinois EPA within seven days of the date that the increases are discovered.

b. Sample the groundwater in all wells listed in Condition III.C.1 and determine the concentration of all constituents identified in 35 IAC 724, Appendix I, and 35 IAC Part 620 to determine whether constituents are present, and if so, at what concentration. The results will accompany the permit modification required by Condition III.I.10.d.

c. For any 35 IAC 724, Appendix I, and Part 620 constituents found in the analysis pursuant to condition III.I.10.b, the Permittee may resample within one 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 IAC 724, Appendix I, and 35 IAC Part 620 analysis will form the basis for compliance monitoring.

d. Submit to the Illinois EPA an application for a permit modification to establish a compliance monitoring program meeting the requirements of 35 IAC 724.199. The application must be submitted to the Illinois EPA within 90 days of the date that the increase is discovered. Furthermore, the application must include the following information:

    i. An identification of the concentration of any 35 IAC 724, Appendix I, and 35 IAC Part 620 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 IAC 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 IAC 724.199; and

    iv. For each hazardous constituent found at the compliance point, a proposed concentration limit under 35 IAC 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 IAC 724.194(b).

e. Submit to the Illinois EPA a corrective action feasibility plan to meet the requirements of 35 IAC 724.200 unless the concentrations of all hazardous constituents identified under Condition III.I.10.b are listed in 35 IAC 620.410 and their concentrations do not exceed the respective concentration limit values given in that table or the Permittee has sought an alternate concentration limits under Condition III.I.10.d.iv for every hazardous constituent identified under Condition III.I.10.b. This plan must be submitted to the Illinois EPA within 180 days of the date the increases is discovered.

f. Submit to the Illinois EPA all data necessary to justify any alternate concentration limit for a hazardous constituent sought under Condition III.I.10.d.iv. This plan must be submitted to the Illinois EPA within 180 days of the date the increases is discovered.

11. If the Permittee determines, pursuant to Condition III.E.4, that there is a statistically significant increase above the background values for the parameters specified in Condition III.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 must submit a permit modification application in accordance with Condition III.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 must:

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 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 90 days of the date that the increase is discovered.

c. Submit to the Illinois EPA an application to make any appropriate changes to the Groundwater Detection Monitoring Program. This application must be submitted within 90 days of the date that the increase is discovered.

Continue to monitor in accordance with the detection monitoring program at the facility.

J. REQUEST FOR PERMIT MODIFICATION

1. If the Permittee or the Illinois EPA determines that the Detection Monitoring Program no longer satisfies the requirements of 35 IAC 724.198, the Permittee must, within 90 days, submit an application for a permit modification to the Illinois EPA Bureau of Land, Permit Section, 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 IAC 705.128 if there is cause for such modification, as defined in 35 IAC 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 III-A: SHALLOW ZONE OBSERVATION MONITORING PROGRAM

A. SUMMARY

In addition to the Groundwater Detection Monitoring Program utilized to monitor the uppermost aquifer at the facility, Zion Site 1 Phase A Landfill has two existing wells to monitor groundwater in the shallow groundwater zone at the facility. These groundwater monitoring wells are intended to detect any releases from the landfill to the shallow groundwater zone that could potentially impact the uppermost aquifer at the facility.

B. IMPLEMENTATION

1. The Permittee shall implement the Shallow Zone 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 previously established requirements.

2. The Permittee must carry out the shallow zone observation monitoring specified in this Permit on the groundwater beneath the Zion Site 1 Phase A Landfill. For the purpose of this Permit the shallow zone consists of discontinuous sand and silt lenses.

C. WELL LOCATION AND CONSTRUCTION

1. The Permittee must install and maintain groundwater monitoring wells at the locations specified on the map presented in the approved permit application and in conformance with the following list:

Well No.	Well Depth top of Inner Casing (ft)	Well Bottom Elevation (ft-MSL)	Well Screen Interval (ft-MSL)
GT02	33.4	712.3	717.3-712.3
GT05	54.4	707.9	712.9-707.9

2. Construction of each new monitoring well/piezometer must be in accordance with the "Monitoring Well Diagram" and "Well Completion Report" forms located on the Illinois EPA website, unless otherwise approved in writing by the Illinois EPA. All new monitoring wells/piezometers to be installed must be continuously sampled and logged on Illinois EPA boring logs contained in the "Field Boring Log" form on the Illinois EPA website, unless otherwise approved by the Illinois EPA.

3. The Permittee must notify the Illinois EPA within 30 days in writing if any of the wells identified in Condition III-A.C.1 are damaged or the structural integrity has been compromised. A proposal for the replacement of the subject well must accompany this notification. The well must 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 must 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 must be provided within 10 ft of the existing well. This well must 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 the wells are replaced. A well which is more than 10 ft 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 must submit boring logs, construction diagrams, and data sheets from installation and development of a new or replacement well to the Illinois EPA at the address below within 30 days of the date that installation of the well is completed. In addition, the Permittee must submit certification that plugging, and abandonment of a well was carried out in accordance with the approved procedures to the Illinois EPA at the address below within 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
   2520 West Iles Avenue
   Post Office Box 19276
   Springfield, Illinois 62794-9276

6. All wells/piezometers must be clearly identified and must be equipped with protective caps and locks. Monitoring wells or piezometers located in high traffic areas must be protected with bumper guards or other alternate barriers.

7. All wells/piezometers not utilized in the approved groundwater monitoring system, but retained by the facility, must be constructed, and maintained in accordance with 77 IAC Part 920 regulations. Monitoring wells and piezometers that are improperly constructed must be abandoned in accordance with Condition III-A.C.3.

D. MONITORING PARAMETERS

1. The Permittee must determine groundwater quality at the monitoring wells identified in III-A.C.1, semi-annually and annually during the active life (including closure and post-closure care period) of the landfill. Samples collected during the semi-annual and annual sampling events of each year must be analyzed for the field parameters and hazardous waste constituents below. Total (unfiltered) values must be used for comparison with groundwater quality standards. Dissolved (filtered) must be used for statistical analysis.

List G1 – Semi-Annual Groundwater Sampling

Field Parameters	STORET Number	Reporting Units
pH *	00400	
Specific Conductance **	00094	micromos/cm
Temperature of Water Sample	00011	(°F)
Turbidity	45626	Ntus
Depth to Water (below land surface)	72019	Ft
Depth to Water (below measuring point)	72109	Ft
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

Must be determined once every five years during the annual sampling event in accordance with Condition III-A.F.3.

Must be surveyed once every five years, or at the request of the Illinois EPA, or whenever the elevation changes as required by Condition III-A.F.2.

* BGQs for pH in well GT02 (6.80-7.52) and well GT05 (6.67-7.65).

** BGQs for Specific Conductance in Well GT02 (2098 micromos/cm) and well GT05 (4142 micromos/cm).

Parameters	STORET Number	BGQs (ug/L)
Acetone	81552	100
Acrolein	34210	25
Acrylonitrile	34215	10
Benzene	34030	5
Bromodichloromethane	32101	5
Bromoform	32104	5
Bromomethane	34413	5
Carbon Tetrachloride	32102	5
Chlorobenzene	34301	5
Chloroethane	34311	10
2-Chloroethyl Vinyl Ether	34576	10

Parameters	STORET Number	BGQs (ug/L)
Chloroform	32106	5
Chloromethane	34418	10
1,1-Dichloroethane	34496	5
1,2-Dichloroethane	34531	5
1,1-Dichloroethene	34501	5
trans-1,2-Dichloroethene	34546	5
1,2-Dichloropropane	34541*	5
cis-1,3-Dichloropropene	34704	5
trans-1,3-Dichloropropene	34699	5
1,4-Dioxane	81582	120
Ethyl Benzene	78113	5
Isobutyl Alcohol	77033	100
Methylene Chloride	34423	5
Pyridine	77045	5
1,1,2,2-Tetrachloroethane	34516	5
Toluene	34010	5
1,1,1-Trichloroethane	34506	5
1,1,2-Trichloroethane	34511	5
Trichloroethene	39180	5
Vinyl Chloride	39175	2
1,2-Dichlorobenzene	34536	10
1,3-Dichlorobenzene	34566	10
1,4-Dichlorobenzene	34571	10
Hexachlorobutadiene	39702	10
Hexachloroethane	34396	10
Naphthalene	34696	10
Nitrobenzene	34447	10
1,2,4-Trichlorobenzene	34551	10

List G2 – Annual Groundwater Sampling

Parameters	STORET Number	Well GT02 BGQs (ug/L)	Well GT05 BGQs (ug/L)
Barium (dissolved)	01005	1000	1000
Barium (total)	01007	1000	1000
Cadmium (dissolved)	01025	2	6
Cadmium (total)	01027	1	2
Chromium (dissolved)	01030	10	20

Parameters	STORET Number	Well GT02 BGQs (ug/L)	Well GT05 BGQs (ug/L)
Chromium (total)	01034	56	10
Cyanide (dissolved)	00723	0.005	0.005
Cyanide (total)	00720	0.005	0.005
Lead (dissolved)	01049	7	5
Lead (total)	01051	6	5
Mercury (dissolved)	71890	0.2	0.2
Mercury (total)	71900	0.2	0.2
Nickel (dissolved)	01065	100	299
Nickel (total)	01067	125	338

Note: All constituents with "dissolved" labeled to the right must be determined using groundwater samples which have been filtered through a 0.45-micron filter and used for statistical purposes along with TOC.

* = The STORET number and name previously used for 1,2-Dichloropropane was Dichloropropane (1,2) and STORET 31541.

2. Background Groundwater Quality (BGQ) values for those constituents listed in Condition III-A.D.1 were previously established using a minimum of four quarters of monitoring data.

3. The Permittee must establish background values in accordance with the procedures specified in the permit application as well as the following procedures:

   a. Background groundwater quality for a monitoring parameter or constituent must be based on data from four consecutive sampling events of the upgradient groundwater monitoring wells for two years.

   b. For those monitoring parameters or constituents not detected above the Lower Limit of Quantitation (LLOQ) during background gathering, the LLOQ must be the established background value.

4. Alternate concentration limits may be established in accordance with 35 IAC 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.

5. The Permittee must establish the intrawell background values in accordance with the procedures specified in the permit application.

E. SHALLOW ZONE OBSERVATION MONITORING PROGRAM

1. The Permittee must determine groundwater quality at each monitoring well identified in Condition III-A.C.1 semi-annually and annually during the active life of the regulated unit (including the closure and post-closure care periods) for constituents found in Condition III-A.D.1. The Permittee must 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 must evaluate the results required by Condition III-A.E.1 and identify:

   a. The concentration of any constituent detected which was not detected in the previous sampling event. "Detected" shall mean a concentration equal to or above the LLOQ listed in the latest promulgated version of USEPA's "Test Methods for Evaluating Solid Wastes, Physical/Chemical Methods", Third Edition (SW-846) and finalized updates for the applicable analytical methods specified in the approved Sampling and Analysis Procedures, which are incorporated by reference in Condition III.G.1 of the Permit.

   b. The concentration of any constituent detected which exhibits a progressive increase over four sampling events. "Progressive Increase" shall mean an increase in the concentration of a constituent in successive sampling events.

3. The Permittee must determine the groundwater elevations in the shallow groundwater zone semi-annually, and report to the Illinois EPA at least annually from monitoring wells identified in Condition III-A.C.1.

4. The Permittee must 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 III-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 monitoring well specified in Condition III-A.C.1 to the background value derived in accordance with the statistical procedures specified in the permit application.

F. GROUNDWATER ELEVATION

1. The Permittee must determine the groundwater surface elevation referenced to mean sea level (MSL) at each well each time groundwater is sampled in accordance with Condition III-A.I.3.

2. The Permittee must report the surveyed elevation of stick-up referenced to MSL when the well is installed (with as-built diagrams) and every five years; or at the request of the Illinois EPA; or whenever the elevation changes in accordance with

Condition III-A.I.4. "Stick-up" refers to the height of the referenced survey datum. This point is determined within ± 0.01 foot in relation to mean seal level, which in turn is established by referenced to an established National Geodetic Vertical Datum.

3. Elevation, as referenced to MSL, of the bottom of each monitoring well (STORET 72020), is to be reported at least annually, or whenever the pumps are removed from the well for maintenance; or at the request of the Illinois EPA; or whenever the elevation changes in accordance with III-A.I.5. The mandatory measurement must be taken during the annual sampling events.

G. SAMPLING AND ANALYTICAL PROCEDURES

1. The Permittee must use the following techniques and procedures described in the approved permit application except as modified, when obtaining and analyzing samples from the groundwater monitoring wells described in Condition III-A.C.1.

   a. Samples must be collected using the techniques described in the permit application.

   b. Samples must be preserved and shipped (when shipped off-site for analysis) in accordance with the procedures specified in the permit application.

   c. Samples must be analyzed in accordance with the procedures specified in the permit application.

   d. Samples must be analyzed in accordance with the procedures specified in the permit application. Groundwater analysis must be in accordance with the most current version of the applicable methods found in USEPA's "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods," Third Edition (SW-846) and finalized updates.

   e. Samples must be tracked and controlled using the chain-of-custody procedures specified in the permit application.

H. STATISTICAL PROCEDURES

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

1. The statistical methods to be used must be as specified in the permit application.

2. Analytical data must be compared to the parameter background values established in accordance with the permit application.

I. REPORTING AND RECORDKEEPING

1. The Permittee must enter all monitoring, testing, and analytical data obtained in accordance with Condition III-A.D, III-A.E, III-A.F, III-A.G and III-A.H in the 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 III-A.D, III-A.E, III-A.F and III-A.H must be collected and reported, as identified in the included table. All additional information required by the groundwater monitoring program (as specified in Conditions III-A.D, III-A.E, III-A.F and III-A.H) must also be submitted to the Illinois EPA at the address listed in Condition III-A.C.5 in accordance with this schedule.

Samples to be Collected During The Months of	Results Submitted to the Illinois EPA by the Following	Parameters
April – June	July 15	List G1 and G2
October – December	January 15	List G1

3. Groundwater surface elevation data measured pursuant to Condition III-A.F.1 must be collected semi-annually and submitted to the Illinois EPA as identified in the table in Condition III-A.I.2.

4. The Permittee must report the surveyed elevation, as required by Condition III-A.F.2, of the top of the well casing "stick-up", referenced to MSL in accordance with the following schedule:

   a. For wells identified in Condition III-A.C.1, every five years (during the 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 must be made every five years (during the annual sampling event), or at the request of the Illinois EPA, or whenever the elevation changes.

5. Elevation of the bottom of each monitoring well identified in Condition III-A.C.1, as referenced to MSL, is to be reported at least annually. This measurement must be taken during the annual sampling event (STORET 72020) in accordance with Condition III-A.F.3.

6. Information required by Conditions III-A.I.2, III-A.I.3, III-A.I.4 and III-A.I.5 must be submitted in an electronic format. The information is to be submitted, as fixed-width text files formatted as found in the form, "Formatting Requirements for the 01 (and 02) Record of the Electronically Submitted Groundwater and Leachate Data" (LPC 160) located on the Illinois EPA webpage titled, "Electronic Reporting of Groundwater Data," and in accordance with the schedule found in Condition III-A.I.2. Additional guidance regarding the submittal of the information in an electronic format can be found on the Illinois EPA website.

7. The Permittee must 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 with wet signatures must accompany the submittal. However, the Permittee must submit one original copy of each notice or report submitted to the Illinois EPA in paper format and (excluding the groundwater and leachate monitoring results submitted in an electronic format) a minimum of two copies (one addressed to the Bureau of Land Permit Section, and one addressed to the regional Field Operation Section). The Form is not to be used for permit modification requests.

8. The Permittee must report all information to the Illinois EPA in a form which can be easily reviewed. All submittals contain tables of data drawings and text (as necessary) to accurately describe the information contained in the submittal.

9. If the Permittee determines, pursuant to Condition III-A.E.4, that there is a statistically significant increase for any of the parameters specified in Condition III-A.D.1 at any monitoring well in Condition III-A.C.1 the Permittee must:

   a. Notify the Illinois EPA in writing indicating which parameters and wells have shown statistical changes and provide the statistical calculations. This notification must be submitted to the Illinois EPA within seven days of the date that the increase is discovered.

   b. Sample the groundwater in all wells listed in Condition III.C.1 and determine the concentration of all constituents identified in 35 IAC 724, Appendix I, and 35 IAC Part 620 to determine whether constituents are present, and if so, at what concentration. The results will accompany the permit modification required by Condition III-A.I.9.d.

   c. For any 35 IAC 724, Appendix I, and 35 IAC Part 620 constituents found in the analysis pursuant to Condition III-A.I.9.c, the Permittee may resample within one month and repeat 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 IAC Part 724,

Appendix I, and Part 620 constituent analysis will form the basis for compliance monitoring.

d. Submit to the Illinois EPA an application for a permit modification to establish a compliance monitoring program meeting the requirements of 35 IAC 724.199. The application must be submitted to the Illinois EPA within 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 IAC 724, Appendix I, and Part 620 constituents found in the groundwater at each monitoring well at the compliance point; and

ii. Any proposed changes to the groundwater monitoring system at the facility necessary to meet the requirements of 35 IAC 724.199; and

iii. Any proposed changes to the monitoring frequency, sampling and analysis procedure or methods or statistical procedures used at the facility necessary to meet the requirements of 35 IAC 724.199.

iv. For each hazardous constituent found, a proposed concentration limit under 35 IAC 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 IAC 724.194(b).

e. Submit to the Illinois EPA a corrective action feasibility plan to meet the requirements of 35 IAC 724.200 unless the concentrations of all hazardous constituents identified under Condition III-A.I.9.b are listed in 35 IAC 620.410 and their concentrations do not exceed the respective Groundwater Quality Standards or the Permittee has sought an alternate concentration limits under Condition III-A.I.9.d.iv for every hazardous constituent identified under Condition III-A.I.9.b.
This plan must be submitted to the Illinois EPA within 180 days of the date the increases is discovered.

f. Submit to the Illinois EPA all data necessary to justify and alternate concentration limit for a hazardous constituent sought under Condition III-A.I.9.d.iv. This plan must be submitted to the Illinois EPA within 180 days of the date the increases is discovered.

10. If the Permittee determines, pursuant to Condition III-A.E.4, that there is a statistically significant increase above or for pH below the background values for the parameters specified in Condition III-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 must

submit a permit modification application in accordance with Condition III-A.I.9.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 must:

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 days of the date that they intend to make this demonstration.

b. Submit a report to the Illinois EPA which demonstrates that a source other than the regulated unit caused the increase, or that the increase resulted from error in sampling, analysis, or evaluation. This report must be submitted within 90 days of the date that the increase is discovered.

c. Submit to the Illinois EPA an application to make any appropriate changes to the Shallow Zone Observation Monitoring Program. This report must be submitted within 90 days of the date that the increase is discovered.

d. Continue to monitor in accordance with the Shallow Zone Observation Monitoring Program at the facility.

J. REQUEST FOR PERMIT MODIFICATION

1. If the Permittee or the Illinois EPA determines that the Shallow Zone Observation Monitoring Program no longer satisfies the requirements of 35 IAC 724.198, the Permittee must, within 90 days, submit an application for a permit modification to the Illinois EPA Bureau of Land, Permit Section, 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 IAC 705.128 if there is cause for such modification, as defined in 35 IAC 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 IV: CORRECTIVE ACTION

A. INTRODUCTION

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

2. The Permittee must conduct, as appropriate: (1) a RCRA Facility Investigation (RFI) to characterize each AOC or SWMU of concern at the facility; (2) determine whether releases of hazardous wastes and hazardous constituents have occurred from each AOC or SWMU of concern, and if so, the nature and extent of the release(s); and (3) gather other data, as necessary, to be used in determining the need, scope and design of a Corrective Measures Program (CMP).

3. Based upon the results of the RFI, the Permittee must develop and implement a CMP to protect human health and the environment from any of the SWMUs or AOCs at the facility.

4. The Permittee must provide corrective action, as appropriate, for: (1) any newly discovered SWMUs and AOCs; and/or (2) future releases for existing SWMUs at the facility.

5. The Permittee must carry out interim measures in accordance with the terms, conditions, and requirements of this Permit, as appropriate, to address existing contamination at the facility until such time as a final corrective measure can be developed and implemented.

6. The requirements of 35 IAC Parts 620 and 742 must be met, when applicable, in establishing remediation objectives for corrective action activities. In addition, all corrective action efforts must meet the requirements of 35 IAC 724.201.

7. The Permittee must incorporate, as necessary, climate change resilience and adaptation considerations into the corrective action required at this facility.

8. All Illinois EPA final decisions regarding RCRA corrective action at this facility are subject to the appeal provisions of the Act.

9. The Illinois EPA and USEPA issued a joint RCRA permit to this facility in 1988. The USEPA portion of that permit contained requirements for addressing two SWMUs at the facility. The Permittee has adequately addressed corrective action at these two SWMUs.

10. Unless there is a desire to modify specific requirements set forth in this Section, information submitted to the Illinois EPA regarding the corrective action requirements set forth in this Section is not a request to modify this Permit nor subject to the requirements of 35 IAC 703, Subpart G.

    a. A completed Illinois EPA RCRA Corrective Action Certification Form (LPC-632) must accompany all corrective action related information submitted to the Illinois EPA.

    b. To allow for proper review of all corrective action related information submitted to the Illinois EPA, the original and two copies of the information must be submitted.

B. CORRECTIVE ACTION REQUIREMENTS

1. Any additional corrective action required to meet the requirements of 35 IAC 724.201 and 35 IAC Parts 742 and 620 must be conducted, as necessary, to address on-site and off-site contamination.

2. The indoor inhalation exposure route was incorporated into 35 IAC Part 742 and became effective in July 2013. The Permittee must address the indoor vapor inhalation exposure route at the facility, as necessary, in accordance with the requirements of 35 IAC Part 742 and obtain an NFA determination.

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

1. The Permittee must notify the Illinois EPA in writing of any newly identified SWMU and/or AOC discovered during the course of groundwater monitoring, field investigations, environmental audits, or other means, no later than 30 days after discovery. The notification shall provide the following information, as available:

    a. The location of the newly identified SWMU and/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/ 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 constituents from the newly identified SWMU/AOC, the Illinois EPA may request in writing, that the Permittee prepare a SWMU Assessment Plan (Plan) and a proposed schedule of implementation and completion of the Plan for any additional SWMU(s)/AOC(s) discovered subsequent to the issuance of this Permit. The 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 Plan must demonstrate that the sampling and analysis program, if applicable, is capable of yielding representative samples and must include parameters sufficient to identify migration of hazardous waste and hazardous constituents from the newly identified SWMU/AOC to the environment.

3. Within 90 days after receipt of the Illinois EPA's request for a Plan, the Permittee must submit a Plan to the Illinois EPA for review and approval.

4. After the Permittee submits the Plan, the Illinois EPA shall either approve, conditionally approve, or disapprove the Plan in writing. If the Plan is approved, the Permittee must begin to implement the Plan within 45 days of receiving such written notification or according to the terms and schedule established within the Plan and any conditions placed on it. If the Plan is disapproved, the Illinois EPA will notify the Permittee in writing of the Plan's deficiencies and specify a due date for submittal of a revised Plan.

5. The Permittee must submit a report documenting the results of the approved Plan to the Illinois EPA in accordance with the schedule in the approved Plan. The SWMU Assessment Report must describe all results obtained from the implementation of the approved 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 IAC Part 742; such objectives are subject to the Illinois EPA review and approval.

7. The Permittee must implement a Corrective Measures Program (CMP), as necessary, to properly address any contamination encountered during the assessment. Guidance regarding the implementation of this program will be provided at the time the Illinois EPA notifies the Permittee of the need for such a program.

8. All efforts carried out at the newly identified SWMU(s)/AOC(s) must meet the requirements of 35 IAC 724.201.

D. 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) 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 30 days after its discovery following the procedures set forth in Condition IV.C.1. Additional investigation and, as necessary, corrective measures efforts at this SWMU must be carried out in accordance with the procedures set forth in Condition IV.E. The results of all corrective action efforts required by this condition must meet the requirements of 35 IAC 724.201.

E. INTERIM MEASURES/STABILIZATION

The Permittee must carry out interim measures/stabilization activities to prevent or mitigate the migration of a release of hazardous substances to the environment, and to provide adequate protection to human health and the environment.

1. At any time during the corrective action process, 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 a RFI or a corrective measure study (CMS) 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 CMS.

2. 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 must include, at a minimum:

   a. 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. Design, construction, and maintenance requirements;

c. Schedules for design and construction; and

d. Schedules for progress reports.

3. 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, including the invocation of dispute resolution, must not affect the schedule for implementation of any other corrective action efforts being carried out at the facility or of any other portion of the Permit.

4. 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.

5. Consistent with the annual reporting requirements of this Permit, the Permittee must submit a report assessing the effectiveness of any interim measures being carried out in accordance with this Permit. Based on a review of this report, the Illinois EPA reserves the right to require additional interim measures be carried out if it is determined that the interim measure is unable to protect human health and the environment. This annual report should at a minimum contain the following information regarding each system which comprises the interim measure:

   a. A discussion of each system's operation during the year. This discussion should address: (1) actual daily, weekly and monthly flow rates through each system; (2) any periods when the systems were not operating; and (3) deviations from the design operating procedures for the system (such as problems with drawing an adequate vacuum, downtime due to equipment failure, etc.);

   b. Results of all monitoring efforts carried out during the year;

   c. A discussion of the effectiveness of the system supported as appropriate with data and calculations; and

   d. Recommended changes, if any, which should be made to the system to improve its effectiveness.

6. The Illinois EPA reserves the right to require the Permittee to remove or treat soil if the Illinois EPA determines that contaminants are present in the soils at levels such that the remediation system is unable to protect human health and the environment. Remediation objectives for corrective measures will be established by the Illinois EPA at a later date.

7. The interim measure approved for a SWMU may not be sufficient to meet the final requirements for corrective action for remediation for the unit. The adequacy of the interim measure will be addressed upon the Illinois EPA review and approval of the RFI reports and the CMP, as required by this Permit. As such, the Permittee may be required to expand this interim measure as necessary to address existing or additional contamination detected through RFI investigations.

8. The Illinois EPA reserves the right to require revision and modification of the interim measures implemented by the facility should it be determined by the Illinois EPA through information obtained through facility monitoring that the interim measures approved by this portion of the Permit are ineffective in protecting human health and the environment.

F. FINANCIAL ASSURANCE

35 IAC 724.201 requires that financial assurance be established for completing required corrective action at SWMUs. As all corrective action efforts at this facility have been completed, the current cost estimate for corrective action at this facility is $0.

1. The Permittee must demonstrate continuous compliance with 35 IAC 724.201 by providing documentation of financial assurance using a mechanism specified in 35 IAC 724.243, in at least the amount of the approved corrective action cost estimate. The words "completion of corrective action" must be substituted for "closure and/or post-closure," as appropriate in the financial instrument specified in 35 IAC 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 IAC 724.246 at its discretion.

2. The financial assurance requirements of 35 IAC 724.201 must also be met for any investigative or corrective action efforts carried out in accordance with Conditions IV.C and IV.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 60 days after the cost estimates are approved.

3. Financial assurance for corrective action must be updated, as necessary, to reflect the current status of the hazardous waste cleanup program at this facility. In addition, this financial assurance must be adjusted annually for inflation.

SECTION V: SPECIAL CONDITIONS

A. HAZARDOUS WASTE MANAGEMENT ACTIVITIES

1. In addition to the terms and conditions of this Permit, the requirements of 35 IAC Part 722 must be met in regard to the management of hazardous waste generated in carrying out the requirements of this Permit. The main hazardous waste generated at this facility is leachate extracted from the closed Phase A landfill.

2. Documentation of compliance with the requirements of 35 IAC Part 722 must be maintained by the Permittee.

B. PUBLIC NOTIFICATION AND PARTICIPATION

1. A repository of all information submitted to the Illinois EPA as part of the requirements of this Permit must be established and maintained at the Zion-Benton Public Library. This repository must be well organized and kept up to date. A comprehensive list of all documents in the repository must be provided, as well as a brief description of each document in the repository. The Permittee must visit the repository on a regular basis to ensure its organization and integrity is maintained.

2. The public participation and public notification requirements of 35 IAC Parts 703 and 705 must be met any time requests to modify this facility are submitted to the Illinois EPA for review and approval.

3. An appropriate facility mailing list as required by 35 IAC Part 705 must be maintained and updated on a regular basis.

C. 39(i) CERTIFICATION

1. The Permittee must provide a completed Illinois EPA permit application form LPC-PA23 with all permit modification requests, additional information, and permit applications that are submitted to the Illinois EPA.

2. The Permittee must submit a current 39(i) certification and supporting documentation with all permit applications.

D. COMPLIANCE SCHEDULE

The following information must be submitted within 60 days of the effective date of this Permit.

1. Approved Permit Application; Section C.6.4 Description of Sampling and Analysis Procedures

a. Revise Section C.6.4. The description of Sampling and Analysis Procedures states that, "groundwater purged from detection monitoring wells will be directed into the adjacent perimeter stormwater ditch and disposed of on the ground within the waste limits". The statement must be revised to include "Purged groundwater will be collected, containerized, and upon receipt of groundwater analysis, disposed of properly." The facility may expand upon how groundwater will be addressed following receipt of the results in the revisions to the Groundwater Sampling and Analysis Plan to indicate how uncontaminated and contaminated groundwater will be managed. Uncontaminated groundwater may be disposed of as described, while contaminated groundwater would need to be disposed in accordance with regulations.

b. To meet the requirements of 35 IAC 620.510(b)(4), the sampling and analysis plan must be revised to propose a methodology for analyzing constituents which complies with the Lower Limit of Quantitation (LLOQ) instead of the Practical Quantitation Limit (PQL) and those values must be equal to or less than the groundwater standards of 35 IAC Part 620, Subpart D, effective March 28, 2025.

    i. The LLOQ (and PQL) are independent of any background or 35 IAC Part 620 value. The historical PQLs used by the laboratory are no longer adequate if they do not meet the LLOQ.

c. Propose a timeline within the permit application for sampling and development of new background values to be conducted which meets 35 IAC Part 620 for all new and existing parameters and their respective standards based on the revisions to 35 IAC Part 620, effective March 28, 2025. Test Methods for Evaluating Solid Wastes, Physical/Chemical Methods, Third Edition (SW-846) and finalized updates no longer references PQL and instead uses LLOQ.

2. Approved Permit Application; Section E.7.3.1 Leachate Quality

a. Parameter Comparison: Indicate if any of the leachate analyses detected a parameter for which the groundwater is/was not being analyzed and the actions taken if this occurred.

3. Submit a revised post-closure cost estimate to reflect a 30-year post-closure care period in accordance with 35 IAC 724.244 and 724.217(a)(1) and provide the required financial assurance in accordance with 35 IAC 724.245, as a stand-alone Class 1* permit modification request.

SECTION VI: STANDARD CONDITIONS

GENERAL REQUIREMENTS

1. EFFECT OF PERMIT. The existence of a RCRA permit shall not constitute a defense to a violation of the Act or Subtitle G, except for prohibitions against 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 IAC 702.181)

2. PERMIT ACTIONS. This Permit may be modified, reissued, or revoked for cause as specified in 35 IAC 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 IAC 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 IAC 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 IAC 702.160)

5. DUTY TO COMPLY. The Permittee must 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 IAC 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 IAC 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 IAC 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 IAC 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 IAC 702.143)

9. DUTY TO MITIGATE. In the event of noncompliance with the Permit, the Permittee must take all reasonable steps to minimize releases to the environment and must carry out such measures as are reasonable to prevent significant adverse impacts on human health or the environment. (35 IAC 702.144)

10. PROPER OPERATION AND MAINTENANCE. The Permittee must 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 include 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 IAC 702.145)

11. DUTY TO PROVIDE INFORMATION. The Permittee must 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 IAC 702.148)

12. INSPECTION AND ENTRY. The Permittee must 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 IAC 702.149)

13. MONITORING AND RECORDS.

    a. Samples and measurements taken for the purpose of monitoring must be representative of the monitored activity. The method used to obtain a

representative sample of the waste must be the appropriate method from 35 IAC 721, Appendix A. Laboratory methods must be those specified in Test Methods for Evaluating Solid Waste, Physical/Chemical Methods, third addition (SW-846) and finalized updates; 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 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 must 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 IAC 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 a permit modification request that complies with the requirements of 35 IAC 703.280. (35 IAC 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 qualified Illinois licensed

professional engineer stating that the facility has been constructed or modified in compliance with the Permit; and

b. The Illinois EPA has inspected the modified or newly constructed facility and finds it is in compliance with the conditions of the Permit; or

If, within 15 days of the date of submission of the letter in paragraph (a), the Permittee has not received notice from the Illinois EPA of its intent to inspect, prior inspection is waived, and the Permittee may commence treatment, storage, or disposal of hazardous waste. (35 IAC 703.247)

16. ANTICIPATED NONCOMPLIANCE. The Permittee must give advance 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 IAC 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 IAC 703.260(b) or 703.272. Changes in the ownership or operational control of a facility must be made as a Class 1 permit modification with the prior written approval of the Illinois EPA. The new owner or operator must submit a revised permit application no later than 90 days prior to the scheduled change. (35 IAC 703.260)

18. MONITORING REPORTS. Monitoring results shall be reported at the intervals specified in the Permit. (35 IAC 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 must be submitted no later than specified in 35 IAC 702.162. (35 IAC 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 human health or the environment. Any such information must be reported orally within 24 hours from the time the Permittee becomes aware of the following circumstances. This report must include the following:

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

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

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

(1) Name, address, and telephone number of the owner or operator;

(2) Name, address, and telephone number of the facility;

(3) Date, time, and type of incident;

(4) Name and quantity of material(s) involved;

(5) The extent of injuries, if any;

(6) An assessment of actual or potential hazards to the environment and human health outside the facility, where applicable; and

(7) Estimated quantity and disposition of recovered material that resulted from the incident.

c. A written submission must also be provided within five days of the time the Permittee becomes aware of the circumstances. The written submission must contain a description of the noncompliance and its cause; the period of noncompliance including exact dates and times and if the noncompliance has not been corrected; the anticipated time it is expected to continue; and steps taken or planned to reduce, eliminate, and prevent recurrence of the noncompliance. The Illinois EPA may waive the five-day written notice requirement in favor of a written report within 15 days. (35 IAC 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 Standard Conditions 18, 19, and 20, at the time monitoring reports, as required by this Permit, are submitted. The reports must contain the information listed in Standard Condition 20. (35 IAC 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 IAC 702.152(h))

23. 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
2520 West Iles Avenue
Post Office Box 19276
Springfield, Illinois 62794-9276

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

25. CONFIDENTIAL INFORMATION. Any claim of confidentiality must be asserted in accordance with 35 IAC 702.103 and 35 IAC Part 161.

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

    a. The post-closure care plan as required by 35 IAC 724.218(a) and this Permit.

    b. Cost estimate for facility post-closure care as required by 35 IAC 724.244(d) and this permit.

    c. Operating record as required by 35 IAC 724.173 and this Permit.

    d. Inspection schedules as required by 35 IAC 724.115(b) and this Permit.

GENERAL FACILITY STANDARD

27. GENERATOR REQUIREMENTS. Any hazardous waste generated at this facility must be managed in accordance with the generator requirements at 35 IAC Part 722.

28. SECURITY. The Permittee must comply with the security provisions of 35 IAC 724.114(b) and (c).

29. 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 IAC 724.115(c). Records of inspections must be kept as required by 35 IAC 724.115(d).

30. CLOSURE REQUIREMENTS FOR ACCUMULATION AREAS. The Permittee must close containers storage areas, tanks, drip pads, or containment buildings used for the accumulation of on-site generated hazardous waste in accordance with the requirements identified at 35 IAC 722.117(a)(8).

PREPAREDNESS AND PREVENTION

31. 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)

RECORD KEEPING

32. OPERATING RECORD. The Permittee must maintain a written operating record at the facility in accordance with 35 IAC 724.173.

POST-CLOSURE

33. CARE AND USE OF PROPERTY. The Permittee must provide post-closure care for the facility as required by 35 IAC 724.217 and in accordance with the approved post-closure plan.

34. 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).

35. COST ESTIMATE FOR FACILITY 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.

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

    c. Kept on record at the facility and updated. (35 IAC 724.244)

    d. Maintained at the value approved by the Illinois EPA with annual adjustment for inflation and cannot be decreased unless approved by the Illinois EPA in a permit modification.

36. FINANCIAL ASSURANCE FOR POST-CLOSURE CARE. The Permittee must demonstrate compliance with 35 IAC 724.245 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 Standard Condition 35. Changes in financial assurance mechanisms must be approved by the Illinois EPA pursuant to 35 IAC 724.245.

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

Illinois Environmental Protection Agency
Bureau of Land - #24
Materials Management and Compliance Section
2520 West Iles Avenue
P.O. Box 19276
Springfield, IL. 62794-9276

37. INCAPACITY OF OWNERS OR OPERATORS, GUARANTORS, OR FINANCIAL INSTITUTIONS. The Permittee must comply with 35 IAC 724.248 whenever necessary.

SECTION VII: REPORTING AND NOTIFICATION REQUIREMENTS

The reporting and notification requirements of each section of the RCRA Permit are summarized below. This summary table is provided to "highlight" the various reporting and notification requirements of this Permit but is not meant to supersede the requirements of the various sections of this Permit.

Condition	**Action**	**Due Date**	
SECTION II: POST-CLOSURE			
C.2	Submit Class 2 permit modification to extend post-closure care period	On or prior to February 10, 2027	
F.5.b	Notification of exceedances of specified levels detected during the required landfill gas monitoring program.	Within two business days	
F.5.d	Reports documenting action being taken to address landfill gas monitoring exceedances.	Weekly	
F.5.e	Class 1* permit modification request proposing changes to the approved landfill gas management plan.	30 days after landfill gas monitoring program exceedances observed, unless able to correct these exceedances prior to this due date	
J.1	Annual report regarding post-closure care efforts carried out each year.	March 1st of the following year	
K.5	Submit notification that post-closure contact person has changed.	Within five days after change is made	
L.1	Permit modification request to change any aspect of the approved post-closure care plan.	180 days prior to date change is needed	
L.2	Submit application for permit modification, if the Permittee wishes to remove any materials from the closed landfill.	At least 180 days prior to the date they wish to remove the materials	
L.4	Submit certification of completion of post-closure and post-closure documentation report.	Within 60 days of completion of post-closure	
SECTION III: GROUNDWATER DETECTION MONITORING PROGRAM			
I.2	Groundwater monitoring data and statistical calculations required semi-annually.	Samples Collected During	Results Due to IEPA by
		April-June	July 15th
		October-December	January 15th
I.3	Groundwater Surface Elevation.	Semi-annually	

Condition	Action	Due Date	
I.4	Groundwater flow rate and direction.	Annually with the groundwater data due July 15th	
I.5	Surveyed elevation.	Every five years or at the request of the IEPA or whenever the elevation changes. In addition, for new wells, at the time of installation.	
I.6	Elevation of the bottom of each well.	Every five years due July 15th	
I.10.a	Notify the IEPA in writing of statistically significant increase.	Within seven days the increase was discovered	
I.10.b	Sample groundwater in all wells for required constituents.	Immediately after increase is discovered	
I.10.d	Apply for permit modification establishing a compliance monitoring program.	Within 90 days the increase was discovered	
I.10.e	Provide the IEPA with corrective action feasibility plan.	Within 180 days the increase was discovered	
I.11.a	Notify the IEPA in writing of intent to make demonstration.	Within seven days the increase was discovered	
I.11.b	Submit a report to the IEPA 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 the Illinois EPA an application to change detection monitoring program .	Within 90 days the increase was discovered	
J.1	Submit permit modification to make changes to detection monitoring program	Within 90 days of determination changes are needed	
SECTION III-A: SHALLOW ZONE OBSERVATION MONITORING PROGRAM			
I.2	Groundwater monitoring data and statistical calculations required semi-annually.	Samples Collected During	Results Due to IEPA by
		April-June	July 15th
		October-December	January 15th
I.3	Groundwater surface elevation.	Semi-annually	
I.4	Surveyed elevation.	Every five years or at the request of Illinois EPA or whenever the elevation changes. In addition, for new wells, at the time of installation.	

Condition	Action	Due Date
I.5	Elevation of the bottom of each well.	Every five years due July 15th
I.9.a	Notify the IEPA in writing of statistically significant increase.	Within seven days the increase was discovered
I.9.b	Sample groundwater in all wells for required constituents.	Immediately after increase is discovered
I.9.d	Apply for permit modification establishing a compliance monitoring program.	Within 90 days the increase was discovered
I.9.e	Provide the IEPA with corrective action feasibility plan.	Within 180 days the increase was discovered
I.10.a	Notify the IEPA in writing of intent to make demonstration.	Within seven days the increase was discovered
I.10.b	Submit a report to the IEPA 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.10.c	Submit to the IEPA an application to change the shallow zone observation monitoring program.	Within 90 days the increase was discovered.
J.1	Submit permit modification to make changes to shallow zone observation monitoring program	Within 90 days of determination changes are needed
SECTION IV: CORRECTIVE ACTION		
C.1	Notification of a newly identified SWMU/AOC.	Within 30 days of discovery
C.3	Submit SWMU Assessment Plan.	Within 90 days of Illinois EPA's request for Plan
C.5	Submit SWMU Assessment Report.	In accordance with the schedule in the approved Plan
D.	Notification of release from existing SWMU.	Within 30 days of discovery
F.2	Financial assurance.	Within 60 days of approved cost estimate
F.3	Updating financial assurance for corrective action.	As necessary
SECTION V: SPECIAL CONDITIONS		
C.1	Submit LPC-PA23 Form.	With all permit modifications, additional information, and permit applications
C.2	Submit 39i Certification Form.	With all permit applications
SECTION VI: STANDARD CONDITIONS		
6	Submit complete application for new permit.	At least 180 days prior to permit expiration

Condition	Action	Due Date
11	Information requested by the IEPA, and copies of records required to be kept by this Permit.	Within a reasonable time
14	Notify the IEPA of planned physical alteration or additions.	As soon as possible
16	Notify the IEPA of changes which may result in permit noncompliance.	As soon as possible
17	Application for permit modification indicating the Permit is to be transferred.	At least 90 days prior to transfer date
20	Report to IEPA any noncompliance which may endanger human health or the environment.	
	- by telephone	Within 24 hours after discovery
	- in writing	Within five days after discovery
21	Report all other instances of noncompliance.	March 1 of each year along with Annual Report
34	Application for permit modification amending post-closure plan.	Within 60 days prior to the proposed change in facility design or operation, or not later than 60 days after an unexpected event has occurred
35.a	Adjust post-closure cost estimate for inflation.	Within 60 days before anniversary date, or within 30 days after close of the firm's fiscal year
35.b	Revision of post-closure cost estimate.	As needed, within 90 days of discovery of revision
36	Change in financial assurance mechanism for post-closure care.	As needed
37	Notify the Illinois EPA of commencement of voluntary or involuntary bankruptcy proceedings.	Within 10 days after commencement of proceeding

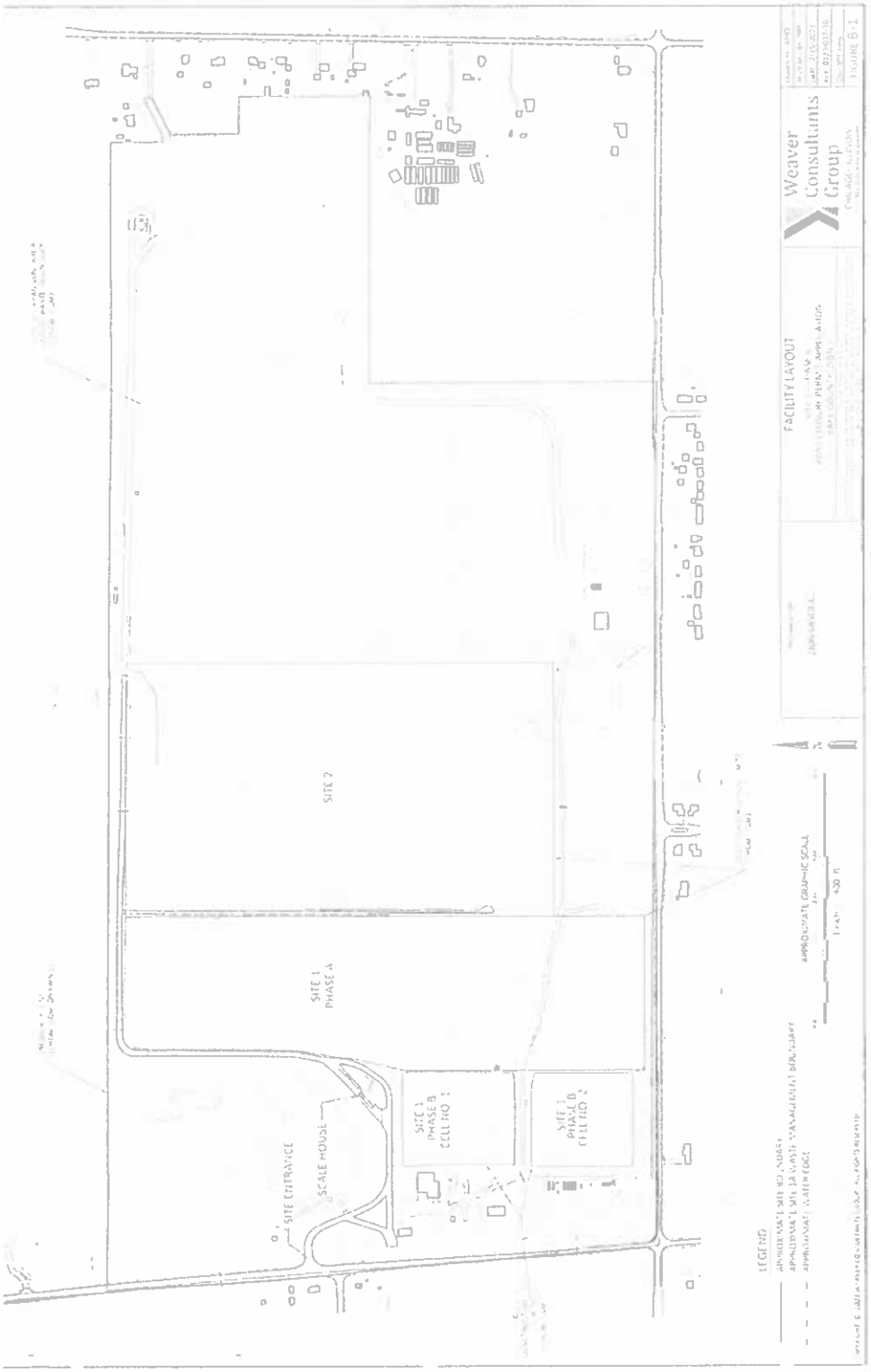
Attachment A: Site Layout Map

Log No. B-23R2

Zion Site 1 Phase A Landfill

LPC No. 0978020001

USEPA ID No. ILD980700728


FACILITY LAYOUT
Weaver Consultants Group
SITE 2
SITE 1 PHASE A
SITE 1 PHASE B CELL NO. 1
SITE 1 PHASE B CELL NO. 2
SCALE HOUSE
SITE ENTRANCE
LEGEND

Attachment B: Approved Permit Application Identification

Log No. B-23R2

Zion Site 1 Phase A Landfill

LPC No. 0978020001

USEPA ID No. ILD980700728

APPROVED PERMIT APPLICATION IDENTIFICATION

The following documents comprise the approved permit application for the renewed RCRA Permit being issued to the Zion Site 1 Phase A Landfill facility in Zion, Illinois (the Illinois EPA log number for this renewed permit is B-23R2; the Illinois EPA identification number for this facility is 0978020001; the USEPA Identification number for this facility is ILD980700728).

Document	**Date**	**Date Received**
RCRA Post-Closure Permit Renewal Application	May 6, 2021	May 10, 2021
Addendum No. 1	June 6, 2025	June 9, 2025
Addendum No. 2	June 20, 2025	June 23, 2025

Attachment C: General Inspection Schedule

Log No. B-23R2

Zion Site 1 Phase A Landfill

LPC No. 0978020001

USEPA ID No. ILD980700728

GENERAL INSPECTION SCHEDULE

Inspection Item	Frequency	Procedure
Leachate Accumulation Tank	Weekly	Section D.3.1.1 of the approved permit application.
Gas Collection and Control System	Monthly	Section D.3.1.2 of the approved permit application
Leachate Collection System	Monthly	Section D.3.1.2 of the approved permit application
Site Security	Quarterly	Section D.3.1.2 of the approved permit application
Vegetation, run-off, erosion	Quarterly	Section D.3.1.2 of the approved permit application
Run-off control, spill prevention	Quarterly	Section D.3.1.2 of the approved permit application
Blower building	Quarterly	Section D.3.1.2 of the approved permit application
Groundwater monitoring system	Semi-annually	Section D.3.1.2 of the approved permit application