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

AUG 05 2025

9589 0710 5270 0389 7047 70

Modern Plating Corporation
Attn: James R. Stenberg, President/CEO
701 South Hancock Avenue
P.O. Box 838
Freeport, Illinois 61032-0838

Re: 1770200010 -- Stephenson County
Modern Plating Corporation
ILD005172325
Log No. B-167R2
RCRA Permits Administrative Record
Permit Draft

Dear Mr. Stenberg:

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 Freeport Public Library located at 100 East Douglas Street, Freeport, Illinois. 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 22, 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:

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

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 regarding groundwater issues, please contact Aidan Fullriede at 217/557-8770 or aidan.fullriede@illinois.gov. For all other question, please contact Takako Halteman, P.E. at 217/524-3274 or takako.halteman@illinois.gov.

Sincerely,

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

Attachments: Fact Sheet
Draft Renewed Hazardous Waste Management Post-Closure Permit

JLR: TNH: 1770200010-RCRA-B167R2-Draft.docx
CS DF TNH AMB

cc: David Servatius – Modern Plating Corp.
Heather Hallett, Foth Infrastructure& Environment LLC (Foth)
Andrea K. Martin, P.E., Foth

FACT SHEET
for
DRAFT Renewed RCRA HAZADOUS WASTE MANAGEMENT POST-CLOSURE PERMIT
Modern Plating Corporation
Freeport, Illinois
STATE ID NO. 1770200010
FEDERAL ID NO. ILD005172325
RCRA POST-CLOSURE PERMIT LOG NO. B-167R2

This fact sheet has been prepared pursuant to the requirements of Title 35 Illinois Administrative Code (35 IAC) 705.143. The fact sheet is intended to be a brief summary of the principal facts and significant factual, legal, methodological, and policy questions considered in preparing a draft renewed Resource Conservation and Recovery Act (RCRA) permit (draft permit).

This draft permit requires Modern Plating Corporation (MPC) to provide at least 30 years post-closure care including groundwater monitoring for a closed hazardous waste landfill unit (known as the corrective action management unit (CAMU)). The post-closure care period began on August 6, 2001, the date the CAMU was certified closed. Procedures for the reduction or extension of the post-closure care period are set forth in 35 IAC 724.217(a) (2) (A) and 724.217(a) (2) (B) respectively.

Pursuant to 35 IAC 705.143(a), this fact sheet is sent to the applicant and to any other person who requests it.

I. INTRODUCTION

The draft permit for MPC contains all of the standard conditions required by 35 IAC Parts 702, 703, and 724; and the applicable conditions of 35 IAC Part 724 for a post-closure care of a closed hazardous waste landfill. This includes monitoring the groundwater.

II. DESCRIPTION OF FACILITY

A. General

MPC is a chrome plating facility located in Freeport Illinois. The facility has conducted plating operations from 1963 to the present. Due to past waste management practices, soils and groundwater became contaminated with hazardous wastes associated with the plating operations. Hazardous constituents of concern include chromium, cyanide, and chlorinated solvents.

Former Hazardous Waste Management Units (HWMUs) at the site included three surface impoundments (identified by MPC as Lagoons 1 - 3) and one container storage unit (identified by MPC as the Shawnee Building).

Former solid waste management units (SWMUs) at the site included the Cyanide

Treatment Vault, Lagoon 0, Lagoon 1A, and the Wetland Soils Area.

The facility originally applied for a RCRA Part B permit but instead opted to pursue RCRA closure. The initial post-closure permit, issued on April 11, 2000, authorized the construction, operation, and closure/corrective actions for the afore mentioned HWMUs and SWMUs at the site. Remediation waste generated from the closure and corrective action activities were placed in an on-site CAMU. This CAMU is located in the former footprint of Lagoons 2 and 3. Closure activities were completed and certified on August 6, 2001. This date also initiated the 30-year post-closure period for the CAMU. A facility map is provided at the end of this fact sheet.

B. Site Descriptions

The MPC facility is an approximate 19-acre site located at 701 South Hancock Avenue, Freeport, Illinois. The land use in the area surrounding MPC is primarily heavy industry and residential.

III. HAZARDOUS WASTE MANAGEMENT ACTIVITIES

A. Post-Closure Care (Section II of Draft Permit)

The following HWMU shall be provided with post-closure care:

Unit Designation	Capacity	Surface Area Dimensions of Unit	Description of Waste and Hazardous Waste No.
Landfill (D80) - CAMU Closed	22,800 Cubic Yards	1.2 acres (approximate)	Electroplating sludge (F006), and soils contaminated with cadmium, chromium, cyanide, and trichloroethylene (F002)

Post-closure permit conditions deal with monitoring, inspections, maintaining, recordkeeping, notifications, certifications, and financial assurance for the HWMU described above in accordance with the provisions of the post-closure care plan. Section II of the draft permit contains conditions specific to post-closure and implementation of the regulatory requirements of 35 IAC 724, Subpart G. The purpose of this draft permit is to require that the above-referenced closed HWMU receives post-closure care for at least 30 years. Groundwater monitoring must continue through the post-closure care period for established monitoring wells, at a minimum. Inspections during this post-closure period must identify any maintenance needed, including, but not limited to, the final cover system and vegetation of the closed landfill (D80). A written record

of the post-closure inspections and maintenance activities performed must be kept at the facility.

B. Groundwater Corrective Action Program (Section III of Draft Permit)

The Permittee maintains a Groundwater Management Zone (GMZ) defined by boundary wells surrounding the CAMU, which contains waste from the historical sludge lagoons, the Shawnee Building, and Cyanide Treatment Vault. Hazardous constituents released from the historical HWMUs have been detected in the groundwater at concentrations above background values. Therefore, Groundwater Corrective Action Monitoring Program is required at the Permittee's facility in Freeport, Illinois. The location of the CAMU and historical HWMUs is shown in Drawings 2 and 2R of the approved permit application.

1. Groundwater Corrective Action Program

Section III of the draft permit implements the regulatory requirements of 35 IAC Part 620 and outlines the groundwater monitoring requirements necessary to minimize impacts to groundwater. The major components of the Groundwater Corrective Action Program include: (1) a GMZ; and (2) semi-annual groundwater monitoring through a network of wells installed both on-site and off-site. Currently, groundwater contamination is addressed through monitored natural attenuation. Groundwater is sampled for hazardous organic and inorganic constituents based on historical activities at the site, and results are reported semi-annually.

The uppermost aquifer at the site is identified as the unconsolidated aquifer consisting of permeable alluvial sand and gravel, as well as the underlying dolomite bedrock aquifer. The depth to groundwater is less than 20 feet below ground surface (bgs) at all wells and less than 10 feet bgs at some wells in the unconsolidated alluvial sand and gravel unit. The groundwater is classified as a 35 IAC Part 620 Class II Groundwater for the alluvial sand and gravel unit, and Class I for the dolomite bedrock aquifer.

a. Parameters

Parameters monitored at the site and the respective concentration limits to be met are listed below. The following hazardous constituents and their concentration limits comprise the groundwater protection standard. The compliance period (post-closure period) during which the groundwater protection standard applies shall be extended until the Permittee demonstrates that the groundwater protection standards of 35 IAC Part 620 have not been exceeded at the GMZ boundary for three consecutive years:

Hazardous Constituents	Concentration Limits (mg/L)	
	Class I	Class II
Tetrachloroethylene	0.005	0.025
Trichloroethene	0.005	0.025
cis-1,2-Dichloroethene	0.07	0.2
Vinyl Chloride	0.002	0.01
Cadmium	0.005	0.05
Chromium	0.1	1.0
Lead	0.0075	1.0
Nickel	0.077	2.0

C. Corrective Action (Section IV of the Draft Permit)

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 SWMU at its facility. Section IV of the draft permit contains the conditions which must be followed to ensure these requirements are met.

Groundwater corrective action activities require the Permittee to monitor and gauge the groundwater contamination around the MPC facility to ensure the monitored natural attenuation remains protective of human health and the environment.

D. Special Permit Conditions (Section V of the Draft Permit)

Section V of the draft permit contains permit conditions and compliance schedule unique to the MPC facility.

E. Standard Permit Conditions (Section VI of the Draft Permit)

Section VI of the draft permit contains standard permit conditions that are regulatory requirements of 35 IAC Parts 702, 703, and 724.

These conditions are of a general nature and are applicable to all hazardous waste management facilities regulated pursuant to an Illinois EPA RCRA Post-Closure permit these conditions include the effectiveness of the permit, permit actions, severability, permit expiration, monitoring and retention of records, transfer of permit, and compliance schedules.

F. Standard Reporting and Notification Requirements (Section VII of Draft Permit)

Section VII of the draft permit summarizes the reporting and notification requirements in each section of the draft permit.

IV. CONSIDERED PERMIT ACTIONS OTHER THAN RCRA

A. Air

The air emissions from a hazardous waste management facility are regulated under RCRA, the Clean Air Act (CAA), the Illinois' Environmental Protection Act, and State regulations at Title 35: Environmental Protection, Subtitle B: Air Pollution. Under these statutes and regulations, a permit must be obtained to install or operate any process which is, or may be, a source of air pollutants. The MPC facility has no RCRA regulated units subject to these air emission requirements but does have appropriate air pollution permits for other units at the MPC facility.

B. Clean Water Act

A discharge of any waste waters from a hazardous waste management facility into the waters of the State, is required to have a National Pollutant Discharge Elimination System (NPDES) permit, issued by the Illinois EPA under Section 39(b) of the Environmental Protection Act. The MPC facility has no RCRA regulated units subject to these water discharge requirements but does have appropriate water permits for other units at the facility.

V. 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 comment on the draft permit conditions prior to Illinois EPA taking any final permitting action on the application for this RCRA Post-Closure Renewal Permit. The comment period will begin on, August 8, 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 22, 2025.

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

Freeport Public Library
100 E. Douglas Street
Freeport, Illinois 61032

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

In response to requests received during the comment period or at the discretion of the Illinois EPA, a public hearing may be held to clarify one or more issues concerning the permit application. A request for a public hearing must be submitted in writing and shall state the nature of the issues proposed to be raised at the hearing. Public notice of a 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:

Sarah Brubaker, Office of Community Relations, #5
Illinois Environmental Protection Agency
2520 West Iles Avenue
Post Office Box 19276
Springfield, Illinois 62794-9276
(217) 786-0790

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

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

1770200010 -- Stephenson County
Modern Plating Corp.
ILD005172325
Permit Log No. B-167R2
RCRA Permits Administrative Record – 24D

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

PERMITTEE
Modern Plating Corporation
701 South Hancock Avenue
Freeport, Illinois 61032-0838

A Renewed RCRA Post-Closure permit is hereby granted to Modern Plating Corp. (MPC) as Owner, 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 MPC to conduct the following hazardous waste activities in accordance with the approved permit application and conditions of this Permit.

Post-Closure Care of a closed landfill (CAMU) (D80)
Groundwater Monitoring Corrective Action
Corrective Action for a CAMU

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

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

JLR: TNH:1770200010-RCRA-B167R2-Draft.docx
TNH JLR KMB

RCRA HAZARDOUS WASTE MANAGEMENT POST-CLOSURE PERMIT

ISSUED TO

MODERN PLATING CORPORATION

FREEPORT, ILLINOIS

STATE ID No. 1770200010

ILD005172325

LOG No. B-167R2

RCRA HAZARDOUS WASTE MANAGEMENT POST-CLOSURE PERMIT
B-167R2
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LIST OF ATTACHMENTS

SECTION I: GENERAL FACILITY DESCRIPTION

A. OWNER AND OPERATOR

The facility is owned and operated by Modern Plating Corporation (MPC), herein referred to as the "Permittee." (35 IAC 702.121, 702.123, and 703.181)

Modern Plating Corp.
701 South Hancock Avenue
Freeport, Illinois 61032-0838

B. LOCATION

1. Location of Facility

The MPC facility is in Freeport, Illinois. MPC owns approximately 19 acres at this location with approximately 1.2 acres used for the management of hazardous waste in a Corrective Action Management Unit (CAMU). The MPC facility is located at:

Modern Plating Corp.
701 South Hancock Avenue
Freeport, Illinois 61032-0838

The facility contact is President/CEO and can be reached at 815-235-3111

2. Facility Map

The location of the closed CAMU (D80) within the MPC facility is shown on the facility drawing in Attachment E of this Permit.

C. DESCRIPTION OF HAZARDOUS WASTE MANAGEMENT ACTIVITIES

The Permittee was only allowed to place the following types of remediation wastes in the CAMU: Electroplating Sludge (F006) and soils contaminated with cadmium, chromium, cyanide, and trichloroethylene (F002). This included soils from the lagoons, Shawnee Building, cyanide vault, wetlands areas, outfall pipeline areas, and any other areas where similar remediation wastes were located during the closure and corrective actions at the facility.

The Permittee is prohibited from placing wastes in the CAMU without prior authorization from the Illinois EPA via a permit modification.

SECTION II: POST-CLOSURE CARE

A. SUMMARY

For the purpose of implementing remedies under 35 IAC 724.201, the Illinois EPA designated a new unit at the MPC facility as a permanent Corrective Action Management Unit (CAMU), as defined in 35 IAC 720.110. The design, construction, operation, and maintenance of the CAMU shall be conducted in accordance with the approved permit application, the requirements contained in this permit, and the regulations at 35 IAC 724.652.

The general location of the permanent CAMU is shown in Attachment E. The CAMU is located north of the wastewater treatment plant and was constructed in the same location that Lagoons 2 and 3 used to occupy. The CAMU is about 1.2 acres in size and holds remediation wastes generated from the closure and remediation of hazardous waste and solid waste management units at the MPC facility. The permitted volume of the landfill was 17,610 cubic yards (yd^3) with a maximum volume of approximately 22,800 cy. The total in-place volume of sludge and soil actually in the CAMU is approximately 14,500 yd^3.

Hazardous waste management units (HWMUs), where waste is left in place, must receive post-closure care for at least 30 years after completion of closure. The CAMU was certified closed on August 6, 2001 (Log No. B-167-M-3). Pursuant to 35 IAC Part 724, activities that require post-closure care include, but are not limited to: (1) maintaining the final cover; (2) monitoring of the groundwater; and (3) providing financial assurance for post-closure activities.

B. UNIT IDENTIFICATION

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

Unit Designation	Capacity	Surface Area Dimensions of Unit	Description of Waste and Hazardous Waste No.
Landfill (D80) – Closed CAMU	22,800 yd^3	1.2 acres (approximate)	Electroplating sludge (F006), and soils contaminated with cadmium, chromium, cyanide, and trichloroethylene (F002)

2. The geographical extents and location of the CAMU areas are identified on the map in Appendix C of the approved permit application and Attachment E. The lowest elevation of the sumps in the CAMU are at or above elevation 753.5 feet

mean seal level (ft-MSL). The CAMU was constructed above elevation 757.0 The slopes of the final cover on the CAMU are not steeper than 3:1 on the perimeter slopes constructed of contaminated soils, and not steeper than 6:1 for the areas covering sludge. The CAMU was designed and constructed to achieve a minimum static slope factor of safety greater than or equal to 1.5 and a seismic factor of safety greater than or equal to 1.3.

3. The liner system on the bottom and sides of the unit is composed of the following layers, described from top to bottom:

   a. Geocomposite drainage material (high density polyethylene [HDPE] drainage net between two layers of geotextile) with a minimum transmissivity of 3×10^{-5} m^2/sec (leachate collection system [LCS]);

   b. 60-mil textured HDPE geomembrane (top liner);

   c. HDPE drainage net (geocomposite on side slopes) with a transmissivity of 3×10^{-5} m^2/sec or more (leak detection system);

   d. 60-mil textured HDPE geomembrane (upper component of the bottom liner);

   e. Geosynthetic clay liner (lower component of the bottom liner); and

   f. Prepared subgrade consisting of a minimum of 1-foot thickness of recompacted fine-grained soils.

4. The final cover system on the top of the unit is composed of the following layers, described from top to bottom:

   a. 6-inch topsoil vegetative layer;

   b. 18 inches rooting zone;

   c. Geocomposite drainage layer;

   d. 40-mil HDPE textured geomembrane;

   e. geosynthetic clay liner; and

   f. 6-inch venting layer above the wastes.

5. A survey plat indicating the location and dimensions of the CAMU and any other hazardous waste disposal units with respect to permanently surveyed benchmarks was prepared and certified by a professional land surveyor. The notes on the plat

state the owner's and operator's obligation to restrict disturbance of the CAMU in accordance with the applicable Subpart G regulations. These notes state:

a. The waste materials contained in the CAMU are considered RCRA hazardous wastes. They include Electroplating sludge (F006), and soils contaminated with cadmium, chromium, cyanide, and trichloroethylene (F002).

b. Any material removed from the CAMU 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 (PIN 18-14-32-402-019) and Drawing No. 2 provided in Appendix J of the August 2001 Closure Documentation Report were filed with the Stephenson County Recorder's Office in Freeport, IL on July 26, 2001. The record data is Document No. 200100016096, Box 15, pages 111-116 (each 11" x 17" drawing was recorded as three separate 8.5" x 11" pages).

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 CAMU is considered a RCRA hazardous waste;

b. Use of the area is restricted; and

c. A survey plat and record of the type, location and quantity of waste material in the CAMU was filed with the Illinois EPA and the County Recorder.

C. POST-CLOSURE CARE PERIOD

1. The post-closure care period for the CAMU began on August 6, 2001, the date of completion of closure of the final portion of the unit listed in Condition II.B.1. Post-closure care for the CAMU must continue for at least 30 years after that date.

Hazardous waste remains in the CAMU, and corrective action activities are ongoing at the site. Due to these conditions and pursuant to 35 IAC 703.241, 724.131, 724.410 as well as Section 12(a), 21(n), and 39(g) of the Illinois Environmental Protection Act (Act), the Permittee must continue to provide post-closure care for the CAMU beyond the initial 30 years of post-closure care (i.e., August 6, 2031). Post-closure care must be extended for an additional 30 years or

until such time as no unacceptable risks to human health and the environment are present at the CAMU, as determined by the Illinois EPA.

2. On or prior to August 6, 2030 (one year before August 6, 2031), the Permittee must submit a Class 2 Permit Modification request to 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 period of the CAMU for an additional 30-year period or until such time as no unacceptable risks to human health and the environment are present at the CAMU, as determined by the Illinois EPA.

3. The Illinois EPA may include restrictions upon the future use of the site if necessary to protect public health and the environment, including permanent prohibition of the use of the site for purposes which may create an unreasonable risk of injury to human health or the environment. After administrative and judicial challenges to such restrictions have been exhausted, the Illinois EPA must file such restrictions of record in the Office of the Recorder of the county in which the hazardous waste disposal site is located.

4. The Permittee must not allow the property where the CAMU identified in Condition II.B.1 is located to be used in a way that could disturb the integrity of the final cover, liners, any components of the containment system, or function of the facility's monitoring systems unless the Illinois EPA finds, by way of a permit modification, that such use is necessary for either of the following reasons:

   a. It is necessary for the proposed use of the property, and will not increase the potential hazard to the public health or the environment, or

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

5. The Illinois EPA may require the continuation of any of the security requirements during part or all of the post-closure care period.

D. INSPECTIONS

1. The Permittee must inspect the components, structures, and equipment at the site in accordance with the inspection schedule in Attachment A and the conditions in this Permit. The results of each inspection must be documented in the facility's operating record.

2. The term "major rainfall event" as used in the inspection schedule shall be defined as any storm event of three inches of rain or more within a 24-hour period.

3. The Permittee must inspect the CAMU identified in Condition II.B.1 at least quarterly and within 72-hours of any rainfall event of three inches or more 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 systems.

4. 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.

5. 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.

6. The Permittee must submit an annual post-closure care summary report to the Illinois EPA by June 1st of each year providing a summary of all inspections, maintenance, and repair activities for the CAMU performed during the preceding12-month period from April through March. The first annual post-closure care summary report must be submitted by June 1, 2026.

E. MONITORING, MAINTENANCE, AND RECORDKEEPING

1. The Permittee must keep and maintain a written operating record that includes all the records, reports, notification, monitoring data, testing or analytical data, and corrective action data required by 35 IAC 724.173 and the conditions in this Permit, for the entirety of the post-closure care period. The operating record must be kept onsite at the facility and available for Illinois EPA review.

2. The Permittee must maintain and monitor the groundwater monitoring system in accordance with Section III, the approved permit application and comply with the other applicable regulations of 35 IAC 724, Subpart F (Groundwater Protection) during the post-closure period.

3. The Permittee must maintain the integrity and effectiveness of the final cover, including making repairs to the cap as necessary to correct the effects of settling, subsidence, erosion, and other events.

4. The Permittee must prevent run-on from eroding or otherwise damaging the final cover. At a minimum the run-on control system must be capable of preventing flow onto the CAMU during peak discharge from a 25-year storm.

5. The Permittee must prevent run-off from eroding or otherwise damaging the final

cover. At a minimum, the run-off management system must be capable of collecting and controlling the volume of water resulting from a 24-hour, 25-year storm.

6. The Permittee must comply with the requirements for landfills described in the approved permit application and the conditions of this Permit. Corrective action must be taken if ponding has been observed, if cracks or erosion channels greater than one inch wide have formed and if gas, odor, vegetative or vector problems arise, if leachate popouts or seeps are present, or if vegetation with tap roots is found to be growing in areas which are not designed to accommodate such vegetation.

7. The permittee must comply with the requirements for landfills at the CAMU as follows:

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

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

   c. Protect and maintain surveyed benchmarks used in complying with surveying and recordkeeping requirements.

   d. The leachate collection and removal system for the CAMU must be operated and maintained such that the depth of leachate over the liner in Phase 1 and Phase 2 of the CAMU does not exceed more than one foot (30 centimeters) to meet the requirements at 35 IAC 724.401(a)(2), 724.401(c)(2), and 724.351(a)(2).

   e. Representative samples of leachate from Phases 1 and 2 must be collected from sample ports indicated in Appendix C, Drawing 12 of the approved permit application annually and analyzed individually for the listed constituents in Attachment H. These samples must be collected during the first quarter inspections. The results of these analyses must be submitted to the Illinois EPA by June 1 each year.

   f. The Permittee must evaluate the leachate analytical parameter list contained in Attachment H to determine whether any parameters listed in 35 IAC 724, Appendix I that are not included in Attachment H could potentially be present in the leachate. Any 35 IAC 724, Appendix I

parameters identified during this evaluation that could potentially be present in the leachate must be added to the leachate analytical parameter list. This evaluation, along with any additional parameters that should be added to the leachate analytical parameter list must be submitted to Illinois EPA within 90 days of the effective date of this Permit.

g. Information required by the groundwater monitoring program in Section III must be submitted in an electronic format. Additional guidance regarding the submittal of the information in an electronic format can be found at the Illinois EPA website.

h. The following leachate withdrawal points will be used in leachate analysis required by Condition II.E.7.f. For purposes of electronic reporting, the points will be renamed as shown below.

Name in Application	Name for Electronic Reporting
Phase 1 Sample Port	L301
Phase 2 Sample Port	L302

i. The Permittee must submit a completed "RCRA Facility Groundwater, Leachate and Gas Reporting form (LPC 592), as a cover sheet for all leachate reports for identification purposes. The form is not be used for permit modification requests.

F. NOTICES AND CERTIFICATION

1. A request to change the post-closure plan must be submitted in the form of a permit modification request. This request must be in accordance with applicable requirements of 35 IAC Parts 702, 703, and 724 and must include a copy of the amended post-closure plan for approval by the Illinois EPA.

2. If the Permittee or any subsequent owner or operator of the land upon which the CAMU listed in Condition II.B.1 is located wishes to remove hazardous wastes and hazardous waste residues, the liner, or contaminated soils, they must request a modification to this Permit in accordance with the applicable requirements in 35 IAC, Parts 703, 705, and 724. 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 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 an Environmental Covenant (EC) for the future land use and management of the property on which the CAMU is located. The EC must be submitted at least one year prior to the date the Permittee expects to submit the Certification of Completion of Post-Closure Care.

Pursuant to 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 must be pursuant to a consent order between the Permittee and the State of Illinois and in the form and format specified by the Illinois EPA.

4. If the Permittee seeks to exit post-closure care, the Permittee must submit the following documents to the Illinois EPA by registered mail no later than 60 days after completion of the established post-closure care period for the CAMU listed in Condition II.B.1.

   a. A properly completed Certification of Completion of Post-Closure Form provided in Attachment F that states the post-closure care for the CAMU 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, operator, and a qualified Illinois licensed professional engineer must sign the Certification Form.

   b. A Post-Closure Documentation Report that documents the post-closure 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 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, and gas systems, and cover system including stormwater run-off and run-on controls. Provide this information in narrative form, and scale 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) The amount of leachate pumped each year from each sump in the unit's leachate collection and leak detection systems during the post-closure care period. Provide this information in both a table and graphically. Demonstrate the unit has met the requirements of 35 IAC 724.410(b)(2).

6) 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.

7) Scaled drawings (plan view and cross-section) showing the horizontal and vertical extent of the unit at the time it was certified closed, every 10 years after it was closed, and the time the Post-Closure Documentation Report is submitted (e.g., at the end of the post-closure period). The scale of the plan view should be 1 inch = 200 feet. All design components of the unit must be shown on the drawings.

   When the drawings are compared, if difference in elevation of more than two feet exists at any location on the unit, the Post-Closure Documentation Report needs to indicate the reason for the change in elevation and provide a justification that the settlement(s) does not cause for concern in the future.

8) 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 care 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(s) at post-closure completion. Photo documentation of the unit should include at least one aerial (satellite) photo and photos of all design features of the unit.

vi. Completed Illinois EPA LPC-PA23 and 39(i) Forms.

c. Documentation that the EC required by Condition II.F.3 has been placed on the deed to the property on which the CAMU is located 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.F.3 has been properly filed with the appropriate governmental office (e.g., State of Illinois, or County Recorder's Office).

Within 60 days after receiving certifications from the owner or operator and a qualified Illinois licensed professional engineer that the post-closure care period has been completed for the CAMU listed in Condition II.B.1 in accordance with the approved post-closure plan, the Illinois EPA shall notify the owner or operator that it is no longer required to maintain financial assurance for post-closure care of that unit unless the Illinois EPA determines that post-closure care has not been in accordance with the approved post-closure plan. 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.

G. FINANCIAL ASSURANCE

1. The permittee must maintain financial assurance for post-closure care of the closed CAMU listed in condition II.B.1 of at least $413,858 (current approved post-closure cost estimate in 2025 dollars) until such time as it is required to be modified pursuant to Condition V.B.1.h. 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 of the closed CAMU.

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

SECTION III: GROUNDWATER CORRECTIVE ACTION PROGRAM

A. SUMMARY

Hazardous waste constituents have been detected in groundwater monitoring wells, at the MPC facility, in the vicinity of HWMUs and SWMUs above the groundwater protection standard and background values. Therefore, a corrective action program meeting the requirements of 35 IAC 724.200 must be implemented at the MPC facility in Freeport, Illinois.

The groundwater corrective action program required by this Permit includes:

1. The construction of the CAMU which serves as the corrective action and subsequently the basis for the establishment of the Groundwater Management Zone (GMZ) (where the GMZ is defined as the three dimensional region containing groundwater being managed to mitigate impairment caused by the release of contaminants from a site that is subject to corrective action or for which the owner/operator undertakes an adequate corrective action in a timely and appropriate manner and provides written confirmation to the Illinois EPA).

2. Determining the quality of groundwater, within the GMZ and in the vicinity of the MPC facility, by comparing analytical results for the specified hazardous constituents to the concentration limits that comprise the groundwater protection standard.

3. Evaluating the effectiveness of the corrective action based on the quality of groundwater within the GMZ and in the vicinity of the MPC facility.

B. IMPLEMENTATION

1. The Permittee must implement the Groundwater Corrective Action Program upon the effective date of this Permit. On that date, the groundwater monitoring requirements set forth in this Permit shall supersede those previously established.

2. The Permittee must carry out the Groundwater Corrective Action Program specified in this Permit on the groundwater beneath the MPC facility in Freeport, Illinois. The uppermost aquifer in the vicinity of the facility has been identified as the unconsolidated aquifer consisting of permeable alluvial sand and gravel, as well as the underlying dolomite bedrock aquifer. For the purpose of this Permit and in accordance with the 35 IAC Part 620 regulations, the uppermost aquifer has been designated: (1) Class II: General Resource Groundwater for the unconsolidated aquifer; and (2) Class I: Potable Resource Groundwater for the underlying dolomite aquifer. "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. Groundwater monitoring wells at the MPC facility are identified as A through E, referring to the specific screened intervals. These are:

A. Screened in the water table in the upper portion of the unconsolidated materials

B. Screened in the lower portion of the unconsolidated materials

C. Screened at the surface of the dolomite aquifer

D. Screened 20 feet into the dolomite aquifer

E. Screened 40 feet into the dolomite aquifer

4. The Permittee must continue corrective action measures during the compliance period to the extent necessary to ensure that the groundwater protection standard is not exceeded. If the Permittee is conducting corrective action at the end of the compliance period, the Permittee must continue that corrective action for as long as necessary to achieve compliance with the groundwater protection standard. The Permittee may terminate corrective action measures taken beyond the period equal to the active life of the waste management area (including the post-closure period) if the Permittee can demonstrate, based on data from the groundwater monitoring program pursuant to 35 IAC 724.200(f), that the groundwater protection standards found in Condition III.D.1 have not been exceeded for a period of three consecutive years.

5. The point of compliance, defined as the vertical surface located at the hydraulically downgradient limit of the waste management area(s) that extends down into the uppermost aquifer underlying the regulated unit, must be postponed for the regulated unit until such time that the GMZ monitoring wells have attained the applicable concentration limits that comprise the groundwater protection standard found in Condition III.D.1 and the GMZ expires. At that time, the facility must submit a proposal for establishment of a point of compliance which satisfies the regulatory requirements found in 35 IAC 724, Subpart F and reflects the current conditions of the facility.

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 uppermost aquifer. The locations of these wells and piezometers are specified in Figure C-5 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)
G06S	MW-6A V	11.6	742.1	747.1 - 742.1
G07S	MW-7A V	13.1	740.7	745.7 - 740.7
G08S	MW-8A V	17.0	741.7	746.4 - 741.4
G09S	MW-9A I	22.3	746.8	755.8 - 745.8
G10S	MW-10A I	21.1	744.0	753.8 - 743.8
G11S	MW-11A	13.2	742.0	747.7 - 742.7
G12S	MW-12A I	12.6	741.1	746.6 - 741.6
G13S	MW-13A I	12.0	741.1	745.9 - 740.9
G14S	MW-14A I	19.8	738.3	751.6 - 741.6
G15S	MW-15A I	12.5	743.7	749.1 - 744.1
G17S	MW-17A	16.7	739.8	743.8 - 738.8
G18S	MW-18A	11.7	743.9	743.6 - 738.6
G19S	MW-19A	14.7	740.6	745.7 - 740.7
GA1S	MW-21A I	24.4	748.0	757.2 - 747.2
GA2S	MW-22A I	24.6	748.8	758.4 - 748.5
"B" Groundwater Monitoring Wells				
G06U	MW-6B	25.7	728.9	737.5 - 727.5
G07U	MW-7B	27.3	726.5	736.2 - 726.2
G12U	MW-12B V	27.4	727.9	735.6 - 725.6
G13U	MW-13B V	27.6	725.5	734.8 - 724.8
G14U	MW-14B V	22.2	736.7	741.6 - 736.6
G15U*	MW-15B*VI	28.5	727.8	734.6 - 724.6
G17U*	MW-17B*VI	37.4	719.3	729.3 - 719.3
G18U*	MW-18B*VI	38.3	717.0	727.3 - 717.3
G19U	MW-19B VI	37.7	717.7	727.9 - 717.9
GA3U	MW-23B VI	20.4	734.6	745.0 - 735.0
"C" Groundwater Monitoring Wells				
G05M	MW-5C V	23.6	755.2	760.1 - 755.1
G06M	MW-6C V	43.0	711.4	715.9 - 710.9
G07M	MW-7C	34.4	719.6	718.3 - 713.3
G08M	MW-8C V	75.2	681.8	687.7 - 682.7
G11M	MW-11C V	65.5	689.5	693.8 - 688.8
G12M	MW-12C	52.9	701.0	705.6 - 700.6
G13M	MW-13C	84.4	669.0	674.0 - 669.0
G14M	MW-14C V	80.5	678.4	683.3 - 678.3
G15M*	MW-15C*VI	103.8	652.2	657.7 - 652.7
G16M*+	MW-16C*+VI	29.0	752.6	764.6 - 754.6

G17M*	MW-17C*VI	108.6	647.9	653.0 - 648.0
G19M*	MW-19C*VI	111.3	644.1	650.6 - 644.6
GA0M	MW-20C I	25.6	741.6	742.3 - 752.3
GA1M	MW-21C	54.5	718.4	772.5 - 717.5
GA2M	MW-22C	58.6	715.6	718.5 - 713.5
GA3M*	MW-23C*VI	34.7	720.3	725.9 - 720.9

"D" Groundwater Monitoring Wells

G05L	MW-5D I	38.6	739.9	749.5 - 739.5
G07L	MW-7D V	50.3	703.5	713.3 - 703.3
G17L*	MW-17D*VI	121.0	635.4	644.8 - 634.8
G18L*	MW-18D*VI	148.0	607.1	615.0 - 608.0
G19L*	MW-19D*VI	150.9	604.3	616.7 - 604.7

"E" Groundwater Monitoring Wells

G11D	MW-11E	100.1	655.0	665.8 - 655.8
G12D	MW-12E	87.5	666.2	676.3 - 666.3
G13D	MW-13E	110.7	642.5	645.8 - 635.8
G14D	MW-14E	111.1	647.7	654.7 - 644.7

River Sampling Points

S201	PR-1 VI	NA	NA	NA
S102	PR-2^{+} VI	NA	NA	NA

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

1. + - Denotes Upgradient Well
2. * - Denotes GMZ Wells
3. V - Analysis of Volatile Organic Compounds listed in Condition III.D.1
4. I - Analysis of Inorganic constituents listed in Condition III.D.1
5. NA - Not applicable

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. This Permit may be modified by the Permittee or the Illinois EPA in accordance with 35 IAC 705.128 if information becomes available that the current well spacing is not adequate to detect contamination from the hazardous waste management areas to the uppermost aquifer, including the construction of new wells geographically close to any previously abandoned wells.

4. 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 must accompany this notification. The well must not be plugged until the new well is online 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.

5. 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 that the well is 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 a new well.

6. Monitoring well and piezometer construction must comply with the minimum standards set forth in 77 IAC Part 920 regulations. The Permittee must submit boring logs, construction diagrams, and data sheets from the 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 included address 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

7. 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.

8. 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.4.

D. GROUNDWATER PROTECTION STANDARD

1. The following hazardous constituents and their concentration limits comprise the groundwater protection standard for the groundwater monitoring wells found in Condition III.C.1. Total values must be used for comparison with groundwater quality standards. Samples collected during the semi-annual events of each year must be analyzed for the field parameters and the hazardous waste constituents below. The facility is not performing statistical analysis on analytical results of sampling; therefore, dissolved values are not required

Field Parameters	**STORET Number**	**Reporting Units**
pH	00400	Standard Units
Specific Conductance	00094	µmhos/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

Note: # Shall be determined during the second sampling event of each year.
Shall 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.

Hazardous Constituents	STORET Number	Groundwater Concentration Limits (mg/L) Class I	Class II
Volatile Organic Compounds			
Tetrachloroethylene	34475	0.005	0.025
Trichloroethene	39180	0.005	0.025
cis-1,2-Dichloroethene	77093	0.07	0.2
Vinyl Chloride	39175	0.002	0.01
Inorganics (Totals)			
Cadmium	01027	0.005	0.05
Chromium	01034	0.1	1.0
Lead	01051	0.0075	1.0
Nickel	01067	0.077	2.0

Hazardous Constituents	STORET Number	Surface Water Quality Standards for the Pecatonica River (mg/L)[1,2] Acute	Chronic	Human Health
Volatile Organic Compounds				
Tetrachloroethylene	34475	1.2	0.15	------
Trichloroethene	39180	12	0.94	0.025
cis-1,2-Dichloroethene	77093	14*	1.1*	------*
Vinyl Chloride	39175	22	1.7	0.002
Inorganics (Totals)				
Cadmium	01027	0.0371	0.0029	------
Chromium	01034	4.5824	0.5462	------
Lead	01051	0.4325	0.0907	------
Nickel	01067	0.2249	0.0136	------

Notes:

* - Illinois EPA Bureau of Water (BOW) established values for 1,2-dichlorotheylene applicable to cis-1,2-dichloroethene

1 - 35 IAC 302.208(e) contains values for inorganics

2 - 35 IAC 302.210, Subpart F contains values for organics

a. In addition to meeting the individual Class I groundwater protection

standards indicated in the table above, an evaluation for mixtures of similar-acting substances must be conducted for non-carcinogenic substances, as required by 35 IAC 620.615.

b. In addition to meeting the individual Class I groundwater protection standards indicated in the table above, the requirements of 35 IAC 620.615 must be met for carcinogenic substances.

c. Calculations to meet Conditions III.D.1.a and 1.b must be based on the most current information to remain protective of human health and the environment.

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

3. The compliance period (post-closure period) during which the groundwater protection standard applies shall be extended until the Permittee demonstrates that the groundwater protection standard has not been exceeded at the point of compliance for three consecutive years.

E. GROUNDWATER CORRECTIVE ACTION PROGRAM

The Permittee performs monitored natural attenuation for groundwater impacted by the CAMU. The Permittee must conduct the corrective action program and perform groundwater monitoring detailed in this section, in accordance with the following:

1. The GMZ must be monitored and maintained. The GMZ is delineated by the designated groundwater monitoring wells found in Condition III.C.1.

a. The results of monitoring the GMZ must be submitted to the Illinois EPA semi-annually in accordance with the schedule found in Condition III.H.2.

b. The GMZ expires when all groundwater monitoring wells within the GMZ have attained the appropriate Class I or Class II concentration limits that comprise the groundwater protection standard found in Condition III.D.1.

i. The appropriate Class I or Class II concentration limits shall be considered attained when groundwater monitoring results meet the appropriate concentration limit for three consecutive years.

ii. In accordance with Condition III.B.2, the unconsolidated material has been designated as Class II: General Resource Groundwater.

iii. In accordance with Condition III.B.2, the dolomite aquifer has been designated Class I: Potable Resource Groundwater.

c. In accordance with Condition III.B.5, at this time, the establishment of the point of compliance will be postponed until such time as the monitoring wells at the facility have attained the appropriate concentrations limits that comprise the groundwater protection standard found in Condition III.D.1 and the GMZ expires.

i. At the time the GMZ expires in accordance with Condition III.E.1.b, the Permittee must submit a proposal for the establishment of a point of compliance which satisfies the regulatory requirements found in 35 IAC 724, Subpart F and reflects the current conditions at the site.

ii. At the time the GMZ expires in accordance with Condition III.E.1.b, the Permittee may request that the Illinois EPA consider corrective action complete. The request should include a demonstration that all releases of hazardous waste or hazardous constituents to groundwater have been remediated to meet the applicable Class I or Class II concentration limits that comprise the groundwater protection standard found in Condition III.D.1 and must also describe how a release will be prevented in the future.

d. Unless otherwise noted in the Permit, the GMZ at the facility will be managed in accordance with 35 IAC Part 620.

2. The Permittee must collect, preserve, and analyze groundwater samples pursuant to Condition III.G.

3. The Permittee must determine groundwater quality at each of the groundwater monitoring wells identified in Condition III.C.1 semi-annually during the active life (including closure and post-closure care period).

4. Samples collected during the first and third quarters must be analyzed for the constituents identified in Condition III.D.1.

5. The Permittee must determine the groundwater flow rate and direction in the uppermost aquifer at least annually from the monitoring wells listed in Condition III.C.1.

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.H.3.

2. The Permittee must determine the surveyed elevation of "stick-up" 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.H.5. "Stick-up" refers to the height of the referenced survey datum. This point is determined within ± 0.01 foot in relation to MSL, 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. The mandatory measurement must be taken during the second semi-annual sampling event of each year.

G. SAMPLING AND ANALYSIS PROCEDURES

The Permittee must use the techniques and procedures described in Section C.8.4.3 of the approved permit application, except as modified, when obtaining and analyzing samples from the groundwater monitoring wells described in Condition III.C.1:

1. Samples must be collected using the techniques described in the Section C.8.4.3 of the approved permit application.

2. Samples must be preserved, shipped, and handled in accordance with the procedures specified in Section C.8.4.3 of the approved permit application.

3. Samples must be analyzed in accordance with the procedures specified in Section C.8.4.3 of 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.

4. Samples must be tracked and controlled using the chain-of-custody procedures specified in Section C.8.4.3 of the approved permit application.

H. 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, and III.G in the operating record.

2. Samples collected to meet the requirements of the groundwater monitoring program described in Conditions III.D, III.E, III.F, and III.G must be collected and reported as identified in the included table. All additional information required by the Groundwater Corrective Action Program (as specified in Conditions III.D, III.E, III.F, and III.G) must also be submitted to the Illinois EPA at the address listed in Condition III.C.6 in accordance with this schedule.

Sampling Event of Calendar Year	**Samples To Be Collected During the Months of**	**Results Submitted to the Agency by the Following**
First Quarter	January – February	April 15
Third Quarter	July – August	October 15

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

4. The Permittee must report groundwater flow rate and direction in the uppermost aquifer, as required by Condition III.E.5 during the second semi-annual sampling event of each 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 second semi-annual sampling event) or at the request of the Illinois EPA, or whenever the elevation changes.

   b. For any new wells at the time of installation and reported in the as-built diagrams, subsequent measurements must be made every five years (during the second semi-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 second semi-annual sampling event in accordance with Condition III.H.2.

7. Information required by Conditions III.H.2, III.H.3, III.H.5, and III.H.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.H.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 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 Illinois EPA in paper format and (excluding the groundwater and leachate monitoring results submitted in an electronic format) a minimum of two electronic copies (one addressed to the Bureau of Land Permit Section, and one addressed to the regional Field Operation Section). Additional paper and electronic copies must be provided upon Illinois EPA request. 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. The Permittee must submit a written report, in accordance with the schedule found in Condition III.H.2 which discusses the effectiveness of the Groundwater Corrective Action Program. At a minimum, the report must include, but is not limited to, the following:

    a. Address the information requirements in Conditions III.D, III.E, III.F, and III.G.

    b. Provide a discussion of any improvement in the quality of groundwater beneath the facility which has resulted from the corrective action.

11. If the Permittee determines that groundwater corrective action is not effective, the Permittee shall:

    a. Notify the Illinois EPA in writing within seven days of the date that this determination is made.

b. Take actions as necessary to reestablish groundwater contaminant concentrations to meet the groundwater protection standards at the GMZ boundary as required by Condition III.D.

c. Submit a written report to the Illinois EPA within 30 days describing the actions taken to reestablish groundwater contaminant concentrations to meet the groundwater protection standards at the GMZ boundary. In addition, the notification must contain information that demonstrates that groundwater contaminant concentrations are being adequately controlled.

d. Submit a request for permit modification to the Illinois EPA within 90 days describing any changes which must be made to the Groundwater Corrective Action Program to ensure that groundwater is being adequately addressed.

I. REQUEST FOR PERMIT MODIFICATION

1. If the Permittee determines that the Groundwater Corrective Action Program no longer satisfies the requirements of 35 IAC 724.200, 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 the 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 the Resource Conservation and Recovery Act (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) at its 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 Area of Concern (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).

4. The Permittee must provide corrective action, also referred to as hazardous waste cleanups, 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 hazardous waste cleanups. In addition, all hazardous waste cleanup 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 hazardous waste cleanups 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 Illinois Environmental Protection Act.

9. The Permittee must provide corrective action, as appropriate, for any future release from the SWMUs present at the Facility.

10. Illinois EPA's final actions on all corrective action-related submittals made by the Permittee are subject to the appeal provision of Section 39 and 40 of the Illinois Environmental Protection Act.

B. CORRECTIVE ACTION REQUIREMENTS

1. The Permittee must conduct and complete an RFI, as necessary, to determine whether releases of hazardous wastes and hazardous constituents have occurred from SWMUs/AOCs, and if so, the nature and extent of the release(s). In addition, the facility must gather other data, as necessary, to be used in determining the need, scope, and design of a Corrective Measures Program (CMP).

2. To date, the facility has conducted a substantial amount of investigation at this facility. Condition IV.C describes the facility's corrective action efforts that have been completed to date. Condition IV.D includes the corrective actions that must still be completed at the facility.

3. Additional investigations and remediation must be conducted, as necessary, to address any on-site contamination and any contamination which has migrated beyond the property boundaries. Corrective action is required for contamination resulting from former or current operation of the facility.

4. The Permittee must obtain "No Further Action" (NFA) determinations from Illinois EPA for any corrective action. NFA will be determined when sufficient information has been provided by the Permittee that the media of interest has been adequately remediated for the SWMUs/AOCs.

5. The historically identified SWMUs/HWMUs/AOCs are listed below.

Designation	Description	Current Status
HWMU	Lagoon 1	Sludge and contaminated soils treated and removed and placed in CAMU. GMZ to address groundwater contamination.
HWMU	Lagoon 2	Sludge and contaminated soils treated and removed and placed in CAMU. GMZ to address groundwater contamination. CAMU is located in the footprint of this HWMU. See Post-Closure Requirements in Section II of this Permit.
HWMU	Lagoon 3.	Sludge and contaminated soils removed and placed in CAMU. GMZ to address groundwater contamination. CAMU is located

		in the footprint of this HWMU. See Post Closure Requirements in Section II of this Permit.
HWMU	Shawnee Building.	Contaminated soils/concrete was excavated and placed in CAMU. Clean fills in excavated area.
SWMU	Cyanide Treatment Vault.	Contaminated soils was excavated and placed in CAMU. Clean fills in excavated area. An engineered barrier was required.
SWMU	Lagoon 0	Sludge and contaminated soils treated, excavated, and placed in CAMU. GMZ to address groundwater contamination
SWMU	Lagoon 1A	Sludge and contaminated soils treated, excavated, and placed in CAMU. GMZ to address groundwater contamination.
SWMU	Wetland Soils Areas (1, 1A,2 and 3)	Contaminated soils were removed and placed in CAMU. Clean fills were placed in excavated areas.
AOC	Outfall Piping Area	Outfall pipeline was abandoned, soils excavated and paced in CAMU.
AOC	Wastewater Release	Contaminated soils due to release of contaminated wastewater from the CAMU construction were excavated was placed in the CAMU.

6. As described in Condition IV.C below, HWMUs, SWMUs, and AOC above obtained no further action for soils based on the described remedial activities upon the closure of the CAMU and commencing of post-closure care as required in Section II of this Permit.

7. Groundwater corrective action responsibilities, which are described in Section III of this Permit, must be completed to obtain an NFA at the facility.

8. The indoor inhalation exposure route was incorporated into 35 IAC Part 742 and became effective in July 2013. The Permittee must address the indoor inhalation

exposure route at the facility as necessary in accordance with the requirements of 35 IAC Part 742 and obtain an NFA determination.

C. CLOSURE AND CORRECTIVE ACTION EFFORTS COMPLETED TO DATE

Remediation activities for the four HWMUs (Lagoon 1 Lagoon 2, Lagoon 3, the Shawnee Building); four SWMUs (Lagoon 0, Lagoon 1A, Cyanide Treatment Vault and Wetlands Areas) and two Areas of Concern (the Outfall Pipe and Wastewater Release Area) were performed in accordance with the final RCRA closure plan dated December 2, 1999 and subsequent modifications. A CAMU was established at the former location of Lagoons 2 and 3 for the placement of contaminated soil generated by remediation activities performed by MPC in accordance with the initial Permit (B-167). Remediation efforts were performed as described in the July 2001 CAMU Landfill Construction Documentation Report and the final August 2001 Closure Documentation Report, which were approved by Illinois EPA on May 7, 2009. A summary of the completed activities follows.

1. Lagoon 0, Lagoon 1, Lagoon 1A, Lagoon 2 , Lagoon 3

   a. Waste sludges in the lagoons were dried, solidified and/or treated. After removal of waste, at least 1 foot of the base and 1 foot of the interior side slopes were excavated. Additional excavation occurred at the lagoons shown in Attachment E, Drawing No. 2 and as described in the summary table provided in Attachment D. The table summarizes for each lagoon, the type of wastes removed, the remedial removal and excavation activities and the remediation quantities.

   b. The sludge/soil removal effort described above first started in Lagoons 2 and the removed sludge/soil was temporarily placed in one of the other lagoons. Once the sludge/soil was removed from Lagoons 2 and 3, a CAMU was constructed within the footprint of these lagoons. The excavated sludge/soil from the lagoons was placed in the CAMU.

   c. The concentrations of contaminants remaining (if any) in the soil left in-place were reported in the Modern Plating CAMU Landfill Construction Document Report dated July 2001, Table 5.1.

   d. After waste was removed from Lagoons 0, 1 and 1A, each area was backfilled with clean soils compacted in lifts and the surface graded to drain.

   e. A Groundwater Management Zone (GMZ) was established to address contaminated groundwater at the MPC facility. The requirements for the GMZ are specified in Section III of this permit.

2. Cyanide Treatment Vault Area

   a. In the Cyanide Treatment Vault Area, 2 feet of contaminated soil was excavated from the floor and sidewalls of the former vault (approximately 200 cubic yards) and placed in the CAMU.

   b. After excavation activities, soil samples were obtained in the lagoon areas and Cyanide Treatment Vault Area to define the amount of residual contamination.

   c. After waste was removed, this area was backfilled with clean soil, compacted in lifts and the surface graded to drain.

   d. An engineered barrier was placed over this area.

3. Shawnee Building

   Three areas at the Shawnee Building were used for storage of hazardous waste. As part of closure, an estimated 30 cubic yards of contaminated soil in 25-foot by 35-foot were removed and placed in the on-site CAMU. This remedial action achieved the remedial objectives and met the closure requirements of 35 IAC 725 Subpart G. After waste was removed, this area was backfilled with clean soil compacted in lifts and the surface graded to drain.

4. Wetland Area

   Approximately 2,905 cubic yards of contaminated soils were removed from four areas in the Wetland Area and placed in the on-site CAMU. Wetland 1 and 1A are off-site in the low area northeast of monitoring well MW-13 and Lagoon 1A . Wetland II and Wetland III are located on-site immediately north of Lagoon 2. Additional excavation occurred in the areas shown in F and described in Attachment D. The remedial action achieved the remedial objectives and met the requirements of 35 IAC 724.201. The wetland areas were returned to their previous grade by backfilling. No further action is necessary in the Wetland Area.

5. Outfall Pipe

   An abandoned outfall pipe from the wastewater treatment plant (WWTP) to the Pecatonica River was investigated as a result of a condition in Illinois EPA's December 2, 1999 closure plan approval letter. The investigation lead to the excavation of an area 30 feet long, 10 feet wide and 10 feet deep. Contaminated soil from this area was placed in the CAMU. Remediation efforts were determined to be adequate in Illinois EPA's August 8, 2000 letter with the condition that an institutional control be placed restricting future land use at the facility to commercial/industrial activities.

6. Wastewater Release

During construction of the CAMU, a pipeline that transfers wastewater from the manufacturing plant to the Waste Water Treatment Plant (WWTP) ruptured (Illinois EPA Incident No. 20001377). Approximately 3 cubic yards of soil were contaminated as a result of the spill and contaminated soil was removed and placed in the CAMU. Remediation efforts were determined to be adequate to address this incident.

7. Environmental Land Use Control

The Modern Plating facility in Freeport, Illinois (PIN 14-32-251-011; 14-32-276-001; 14-32-402-004; 14-32-426-003; 14-32-402-019) is subject to an Environmental Land Use Control (ELUC) recorded with the Stephenson County Clerk/Recorder on June 1, 2010 (Document Number 201000111587). A drawing showing the boundary of the ELUC is provided in Attachment E. This ELUC shall apply in perpetuity to the facility and shall not be released until: (1) Illinois EPA determines that there is no longer a need for this ELUC; (2) Illinois EPA, upon written request from the property owner and in accordance with 35 IAC 742.1010, issues an amended certification of closure or a permit modification approving modification/elimination of the ELUC requirements; and (3) a release or modification of the ELUC is filed on the chain of title for the Property.

a. The recorded ELUC places the following restrictions on the subject facility:

i. The facility may only be used for commercial/industrial activities in the future;

ii. An engineered barrier must be maintained over the Cyanide Treatment Vault, the Outfall Piping Area and Lagoons 0, 1, 1A, 2 and 3;

iii. The groundwater under the facility may not be used as a potable supply of water;

iv. A site safety plan meeting the requirements of 29 CFR 1910 and 1926 must be developed and implemented any time construction/excavation work takes place beneath the engineered barriers mentioned above;

v. Any soil removed from beneath the engineered barriers mentioned above must be properly managed in accordance with 35 IAC, Subtitle G: Waste Disposal.

D. CORRECTIVE ACTION STILL TO BE COMPLETED

1. In July 2013, 35 IAC Part 742 was modified to include the indoor inhalation exposure route. The facility must assess this exposure route at the facility as volatile organic compounds (VOCs) have been managed and detected at the site. Thus, the Permittee must meet the requirements of 35 IAC Part 742 to address the indoor inhalation exposure routes on a site-wide basis to ensure compliance.

2. Any groundwater contamination at the facility must be addressed, as necessary, to meet the requirements of 35 IAC Parts 620 and 742. Note that 35 IAC Part 620 was updated in March 2025.

3. Evaluation, investigation, and remediation, as necessary, must be conducted to meet the requirements of Conditions IV.D.1 and 2 above for the SWMUs/HWMUs/AOCs identified in Condition IV.B.5 and within the GMZ established for the facility.

E. CORRECTIVE MEASURE REQUIREMENTS

1. If it is determined that corrective measures must be taken at a SWMU or AOC, then the Permittee must implement a CMP for such SWMUs in general accordance with the procedures set forth in Attachment G. The corrective measures implemented by the Permittee must be sufficient to ensure the appropriate requirements of 35 IAC Parts 302, 620, 724, and 742 are met.

2. The types of corrective measures which may be implemented include, but are not limited to:

    a. Removal of the contaminants or the contaminated media so that the remaining media meet remediation objectives developed in accordance with 35 IAC Part 742;

    b. Closing the SWMU as a landfill by establishing a proper final cover over the SWMU and then providing proper long-term monitoring/maintenance/management of: (1) leachate; (2) subsurface gas: (3) final cover system; and (4) groundwater;

    c. Establishing engineered barriers to restrict exposure to the contaminants remaining at the SWMU or AOC (necessary to certain remediation objectives developed in accordance with 35 IAC Part 742);

    d. Establishing institutional controls to restrict activities at the facility, as necessary, to support remediation objectives established in accordance with 35 IAC Part 742.

3. The CMP described in Attachment G consists of five phases:

   a. Phase I--conceptual design of the selected corrective measure;

   b. Phase II--development of the final design plans for the corrective measure, including installation and operation/maintenance plans;

   c. Phase III--actual construction/installation/implementation of the corrective measure;

   d. Phase IV—operation/maintenance/monitoring, as necessary, of the corrective measure to ensure it is being properly implemented and is properly protecting human health and the environment.

   e. Phase V--demonstration/verification that the corrective measure has been completed and that the established remediation objectives have been achieved.

   f. Phases may be combined or skipped, depending on the actual corrective measure selected. The overall CMP implemented at a given SWMU must: (1) be logical in nature: and (2) allow for Illinois oversight and approval throughout the entire process. As such, it will be necessary for the Permittee to submit workplans/reports regarding all aspects of corrective measures for Illinois EPA review and approval prior to carrying out any corrective measure activity.

4. A Phase I CMP report, or its equivalent, must be submitted to Illinois EPA within ninety (90) days of the date that Illinois EPA notifies the Permittee of the need for a CMP.

5. Subsequent CMP reports must be submitted to Illinois EPA for review and approval in accordance with a schedule approved by Illinois EPA.

6. Once all corrective measures have been completed, a report must be developed documenting all efforts and results associated with the completed measure, including, as appropriate, information demonstrating the approved remediation objectives for the project have been achieved.

F. REQUIREMENTS FOR ADDRESSING NEWLY IDENTIFIED SWMU(s) AND AREA(s) OF CONCERN (AOCs)

1. The Permittee must notify the Illinois EPA in writing of any newly identified SWMU and/or AOCs 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 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. Within 90 days after receipt of the Illinois EPA's request for a SWMU Assessment Plan (Plan), the Permittee must submit a Plan to the Illinois EPA for review and approval.

3. 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 shall notify the Permittee in writing of the Plan's deficiencies and specify a due date for submittal of a revised Plan.

4. 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.

5. 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 SMWU/AOC in accordance with 35 IAC Parts 742 and 620; such objectives are subject to the Illinois EPA review and approval.

6. The Permittee must implement a 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.

7. All efforts carried out at newly identified SWMU/AOCs must meet the requirements of 35 IAC 724.201.

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

H. INTERIM MEASURES/STABILIZATION

The Permittee must carry out interim measures/stabilization activities to prevent or mitigate the migration of a release of hazardous substances into 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 Measures 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 shall 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, shall not affect the schedule for implementation of the 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.

   a. Consistent with the annual reporting requirements of this permit, the Permittee shall 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 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.

5. 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.

6. 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 the RFI.

7. 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.

I. FINANCIAL ASSURANCE FOR CORRECTIVE ACTION

In accordance with 35 IAC 724.201, financial assurance must be established while completing required corrective actions at solid waste management units:

1. The Permittee must prepare a cost estimate for the completion of any corrective action required under this permit, in order to provide financial assurance for completion of corrective action, in order to provide financial assurance for the approved amount of that cost estimate within 90 days of the date of the effective date of this permit, as required under 35 IAC 724.201(b). Such a cost estimate must be based upon the cost of contamination investigations and assessments for the SWMU(s), and design, construction, operation, inspection, monitoring, and maintenance of the corrective measure(s) to meet the requirements of 35 IAC 724.201 and this permit. These estimates must be based upon third party costs. The revised cost estimate for corrective action must be submitted to the Illinois EPA as necessary.

3. 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 cost estimate required under Condition V.I.1 the words "completion of corrective action" shall be substituted for "closure and/or post-closure", as appropriate in the financial instrument specified in 35 IAC 724.251. The documentation shall be submitted to the Illinois EPA within 60 days after the Illinois EPA's approval of the initial or revised cost estimates required under Condition V.I.1 and as required by the Illinois EPA. 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.

4. It must be noted that cost estimates and financial assurance must be provided for the operation of the groundwater remediation system required by Section III of

this permit as such a system is necessary to meet the requirements of 35 IAC 724.201.

5. 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. 39i CERTIFICATION

The Permittee shall submit a current 39i certification and supporting documentation with all applications for a permit.

B. COMPLIANCE SCHEDULE, PERMIT MODIFICATION

1. The facility must submit to Illinois EPA for review and approval the following information as a Class 1* permit modification request(s) within 90 days of the effective date of this Permit:

   a. An updated EPA Form 8700-23 RCRA Part A application. Both new and existing facilities that treat, store, or dispose of regulated hazardous waste are required to submit a RCRA Hazardous Waste Part A Permit Application. This form must include all hazardous wastes that the Permittee currently generates at the facility. (*Section A.1 of the approved permit application)*

   b. Identification and detailed descriptions of any hazardous waste management units (HWMUs) and solid waste management units (SWMUs) at the facility. Include the locations on the required facility layout map as described in Condition V.B.1.c below.

   c. Scaled facility layout map(s) that includes, but not limited to, the following items (*Section B.2 of the approved permit application)*:

      i. The general and operational facility features, such as existing buildings (e.g., the Leachate Pump Building), current and past waste management units (HWMUs and SWMUs), containment area(s), any access roads, gates, fences, and other structures or features that should be included; and

      ii. Corrective Action Management Unit (CAMU) boundaries, the Leachate Pump Building (adjacent to the CAMU), the fences and warning sign locations for CAMU, and the groundwater monitoring well locations.

   d. The facility's most recent contingency plan revision for operation of the CAMU. This plan must be submitted in accordance with 35 IAC 724.153. (*Referenced throughout the approved permit application*).

e. Additional documentation describing the procedures and/or maintenance plan for CAMU Post-Closure Care activities. Update and revise Tables B-1 and B-2 of the approved permit application (which are included as Attachment A of this Permit) to address the following:

i. "Cleaning of interior piping annually", is included in Table B-2, but not included in Table B-1;

ii. Description and procedure for "Check for Leaks" in Table B-1 for the leachate collection system;

iii. Descriptions and frequency of maintenance necessary for the equipment for both leachate detection and collection system. Tables B-1 and B-2 indicate to refer to O&M Plan only. Indicate a minimum frequency of the maintenance and calibration check schedule;

iv. Procedures and safety precautions necessary for post-closure care activities, which include, but are not limited to, all communication devices, monitoring, safety, spill control, decontamination, and emergency equipment, as well as operating and structural equipment that are vital to prevent, detect, or respond to environmental or human health hazard; and

v. Identify and include, in Table B-1, a timeframe to complete each activity (e.g., identify a particular month or quarter, etc.).

f. The most recent documentation for annual cleaning of the leachate collection and leak detection systems with a high-pressure jetting system, described as a required maintenance activity in Appendix Q, Item 12.4 of the approved permit application. (*Section E.8.3 of the approved permit application)*

g. A workplan to modify the current leachate system such that the leachate depth over the liner does not exceed one foot (30-cm), in accordance with 35 IAC 724.401(c)(2) and Condition II.E.7.d of this Permit. This workplan must address, but is not limited to the following:

i. The leachate pump system is activated at one foot (30-cm) of leachate accumulation (*Section E.3.2 of the approved permit application)*;

ii. The pump alarm is triggered after an additional one foot (30-cm) leachate has accumulated from the pump activation point (*Section D.2 of the approved permit application)*; and

iii. Provide all relevant engineering prints as part of this proposed workplan. Include updates to existing prints with any updates reflecting proposed changes.

h. A revised post-closure cost estimate and financial assurance to meet the required minimum of thirty (30) years post-closure care costs for the CAMU, as stated in Conditions II.G.1 and 2. All cost estimates must be updated to the current year. *(Sections E.11 and F.6 and Appendix N of the approved permit application)*

i. A proposal to address the continued exceedances of the 35 IAC Part 620 Groundwater Quality Standards beyond the GMZ boundary. (*Sections C.8, C.8.1, C.8.1.1, C.8.1.5, C.8.1.6, C.8.3, C.8.4 of the approved permit application*)

2. Within 180 days of the effective date of this Permit, the facility must submit to Illinois EPA for review and approval the following as a Class 1* permit modification request(s).

a. An updated survey plat indicating the location and dimensions of the CAMU with respect to permanently surveyed benchmarks. This plat must be prepared and certified by a professional land surveyor). (*Sections II.E and II.F of the approved permit application)*

b. The following monitored natural attenuation parameters have been added to the facility's sampling list: ethene/ethane/methane, dissolved oxygen, and oxygen-reduction. (*Section C.8.4.1 of the approved permit application)*

The facility must include the sampling and analysis of these additional parameters during the next sampling event.

c. Accurate and consistent horizontal and vertical groundwater gradients. (*Section E.1.2 of the approved permit application*)

d. A revised Section C.8.4.7 to the approved permit application to reference the specific approval letter in which the Illinois EPA approved a demonstration for the groundwater ingestion route in accordance with 35

IAC 742.925 or remove the reference. (Section C.8.4.7 *of the approved permit application*)

e. A water well survey as described in 35 IAC 1600.210 and the guidance document entitled, "Well Survey Procedures at Bureau of Land Permitted Facilities". (*Section C.5 of the approved permit application*)

f. A discussion to address the screened intervals of facility wells compared to well(s) accessing potable water at individual or community water supply wells, if identified. (*Section C.5 of the approved permit application*)

g. Propose low-flow sampling methods, such as bladder pumps. (*Section C.8.4.3 of the approved permit application*)

C. COMPLIANCE SCHEDULE, CORRECTIVE ACTION

Within 180 days of the effective date of this Permit, the facility must submit to Illinois EPA, for review and approval, a RCRA facility investigation (RFI) work plan to address indoor inhalation exposure pathway, in accordance with 35 IAC Part 742, Conditions IV.B.8 and IV.D.1, and Attachment G of this Permit. This workplan must include a proposed cost estimate for the proposed activities to meet the requirements in Condition IV.I. This work plan should be submitted as a corrective action submittal, not a permit modification request.

SECTION VI: STANDARD CONDITIONS FOR POST-CLOSURE CARE

GENERAL REQUIREMENTS

1. EFFECT OF PERMIT. The existence of a RCRA Permit must 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 Ill. Administration Code (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 must 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, other than noncompliance authorized by an emergency permit, 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 must 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. (35 IAC 702.150)

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 Edition (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 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 may not commence treatment, storage, or disposal of hazardous

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

a. The Permittee has submitted to the Illinois EPA by certified mail or hand delivery a letter signed by the Permittee and a 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 condition 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 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 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 must 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 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:

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

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

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

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

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

iii. Date, time, and type of incident;

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

v. The extent of injuries, if any;

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

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

c. A written submission must also be provided within five 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 post-closure is complete, the following documents and amendments, revisions, and modifications to these documents:

    a. Post-closure plan as required by 35 IAC 724.218(a) and this Permit;

    b. Cost estimate for 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; and

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

GENERAL FACILITY STANDARDS

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 IAC 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 POST-CLOSURE. The Permittee's original post-closure cost estimate, prepared in accordance with 35 IAC 724.244, must be:

    a. Adjusted for inflation either 60 days prior to each anniversary of the date on which the first post-closure cost estimate was prepared or if using the financial test or corporate guarantee, within 30 days after close of the firm's fiscal year. This Permit condition is applicable throughout the entirety of the post-closure care period.

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

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

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

36. FINANCIAL ASSURANCE FOR POST-CLOSURE CARE. The Permittee must demonstrate compliance with 35 IAC 724.245 and 703.241(a)(2) by providing documentation of financial assurance, as required by 35 IAC 724.251, in at least the amount of the cost estimates required by Standard Condition 35. This financial assurance must be maintained at such value throughout the post-closure care period and must be adjusted accordingly pursuant to 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 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 Post-Closure Permit is summarized below. This summary is provided to highlight the various reporting and notification requirements of this Permit.

CONDITION	SUBMITTAL	DUE DATE
SECTION II: POST-CLOSURE CARE		
II.C.2	Submit Class 2 modification request to extend post-closure care period.	On or prior to April 6, 2030
II.D.6	Submit annual post-closure care report.	June 1
II.E.7.e	Submit results of leachate analysis.	June 1
II. F.2	Request permit modification to remove hazardous waste, liner or contaminated soils.	Prior to removing waste, liner, or contaminated soils
II.F.4	Submit Certification of Completion of Post-Closure Form, Post-Closure Documentation Report and Documentation of Recorded EC.	Within 60 days after completion of the post-closure care period
SECTION III: GROUNDWATER DETECTION MONITORING PROGRAM		
III.C.4	Notify IEPA if any of the wells identified in Condition III.C.1 are damaged, or the structural integrity has been compromised.	Within 30 days of the date the damage is detected
III.C.6	Provide Illinois EPA boring logs, construction diagrams and data sheets from new or replacement wells.	Within 30 days of the date installation is complete
III.H.2	Reporting of groundwater monitoring data and statistical calculations are required semi-annually.	April 15 and October 15
III.H.3	Semi-annual groundwater surface elevation data.	April 15 and October 15
III.H.4	Groundwater flow rate and direction in the uppermost aquifer, submitted with second semi-annual groundwater report.	October 15

CONDITION	SUBMITTAL	DUE DATE
III.H.5	Surveyed elevation of the top of the well casing ("stick-up"), submitted with second semi-annual groundwater report.	October 15 every 5 years
III.H.6	Elevation of the bottom of each monitoring well, submitted with second semi-annual groundwater report.	October 15
III.I.1	Apply for permit modification to modify the corrective action monitoring program.	Within 90 days of determining the program no longer meets the requirements of 35 IAC 724.200.
SECTION IV: CORRECTIVE ACTION		
IV.F.1	Notify Illinois EPA in writing of any newly-identified SWMU(s) or AOC(s).	No later than 30 days after discovery.
IV.F.2	Submit a SWMU Assessment Plan to Illinois EPA.	Within 90 days after receipt of the Illinois EPA request.
IV.F.3	Implement SWMU Assessment Plan.	Within 45 days of Illinois EPA Approval of SWMU Assessment Plan.
IV.F.4	Submit a report documenting the results of the approved SWMU Assessment Plan to the Illinois EPA.	In accordance with the schedule in the approved SWMU Assessment Plan.
IV.G	Notify Illinois EPA of any release(s) from SWMU(s)	Within 30 days of discovery.
IV.H.2	Submit detailed information regarding the proposed interim measure to the Illinois EPA for approval.	Prior to implementing any interim measures beyond those specified in this permit.
IV.I.1	Submit corrective action cost estimate.	Within 90 days of the effective date of this permit and update as necessary.
IV.I.3	Submit financial assurance.	Within 60 days of the approval of the initial cost estimate and as

CONDITION	SUBMITTAL	DUE DATE
		required by the Illinois EPA.
IV.I.5	Submit annual corrective action cost estimate.	As necessary.
SECTION V: SPECIAL CONDITIONS		
V.A	Submit 39i certification and supporting documentation	With all application for a permit.
DSECTION VI: STANDARD CONDITIONS		
VI.6	Complete application for new permit.	At least 180 days prior to permit expiration.
VI.11	Information requested by Illinois EPA and copies of records required to be kept by this permit.	Reasonable time.
VI.14	Notify Illinois EPA of planned physical alterations or additions.	As soon as possible.
VI.16	Notify Illinois EPA of changes that may result in permit noncompliance.	As soon as possible.
VI.17	Application for permit modification indicating permit is to be transferred.	At least 90 days prior to transfer date.
VI.20	Report to Illinois EPA any non-compliance that may endanger health or environment.	
	By telephone	Within 24 hours after discovery.
	In writing	Within five days after discovery.
VI.21	Report all other instances of noncompliance.	March 1 of each year along with Annual Report.
VI.34	Application for permit modification amending post-closure plan.	Within 60 days prior to the proposed change in facility design or operation, or no later than 60 days after an unexpected event has occurred.

CONDITION	SUBMITTAL	DUE DATE
VI.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.
VI.35.b	Revision of post-closure cost estimate.	As needed, within 90 days of discovery of revision.
VI.36	Change in financial assurance mechanism for post-closure.	As needed
VI.37	Notify Illinois EPA of commencement of voluntary or involuntary bankruptcy proceedings	Within 10 days after commencement of proceeding.

ATTACHMENT A

INSPECTION SCHEDULE & INSPECTION FORM

STATE ID # 1770200010

ILD005172325

Post-Closure Permit Log No. B-167R2

Table B-1
Post-Closure Inspection Schedule and Log for CAMU Landfill

Equipment or Area	Description	Activity Description	Frequency	Date/ Time / Inspector	Comments and Action Items
Leachate Collection System (LCS)	Side Slope Riser (SSR) Pump and Piping	Check for leaks.	Annually		
		Check for leaks weekly thereafter.	5 days after start-up, repair leaks within 15 days.		
		Service pumps.	Per manufacturer's O&M manual.		
		Check pressure transducer for proper operation.	Per manufacturer's O&M manual.		
		Record liquid level and leachate quantity in sump.[1]	Monthly record gallons pumped from LCS and LDS for each phase.		
		Check flow meter and pump controls for proper operation.	Per manufacturer's O&M manual.		
		Clean paddlewheel on liquid flow sensors.	As needed for trouble free operation.		
		Check alarms and alarm lights for proper operation (press down lights on control panel).	Weekly during active life, monthly after closure.		
Leak Detection System (LDS)		Check liquid levels and remove liquids above pumping level.	Weekly during active site life; monthly after closure.		
		Record liquid level and leachate quantity in sump.[1]	Monthly record gallons pumped from LCS and LDS for each phase.		
		Check liquid levels and remove liquids above pumping level	Refer to 35 IAC 724.403 for frequencies if leakage does not occur.		
		Check pressure transducers for proper operation.	Per manufacturer's O&M manual.		
		Check alarms and alarm lights for proper operation.	Weekly during active site life, monthly after closure.		

Table B-1, Post-Closure Inspection Schedule and Log for CAMU Landfill *(continued)*

Equipment or Area	Description	Activity Description	Frequency	Date/ Time / Inspector	Comments and Action Items
Exterior of CAMU Landfill	Berms	Check for wet spots and leaks.	Semiannually		
		Check for settlement, slumping or sloughing.	Semiannually		
		Check for erosion and bare sod areas.	Semiannually and after each major rainfall event (greater than ½ inch).		
Run-on and Run-Off Control	Erosion Control Devices	Riprap-inspection for washout or undercutting.	Quarterly and after each major rainfall event.		
		Ditches-inspect for siltation and/or erosion.	Quarterly and after each major rainfall event.		
		Erosion bales or silt fencing-inspect for washout or undercutting.	Quarterly and after each major rainfall event.		
		Culverts-inspect for washout/siltation at inlet and outlet.	Quarterly and after each major rainfall event.		
	Sedimentation Basins	Inspect berms for erosion, scouring and slumping	Quarterly and after each major rainfall event		
		Inspect pond bottom for build-up of sediment.	Quarterly and after each major rainfall event.		
		Inspect inlet and outlet for erosion and sedimentation.	Quarterly and after each major rainfall event.		
		Inspect trash rack and rock filter.	Quarterly and after each major rainfall event.		
Final Cover Surface	Vegetation	Inspection for growth and overall health.	Quarterly and after each major rainfall event.		
		Evidence of stress.	Quarterly and after each major rainfall event.		
		Bare spots from erosion, washout or dic-offs. etc.	Quarterly and after each major rainfall event.		
		Mow final cover	Annually during periods of dry weather		

Equipment or Area	Description	Activity Description	Frequency	Date/ Time / Inspector	Comments and Action Items
Final Cover System Integrity		Erosion resulting in rills, gullies or bare soil.	Quarterly and after each major rainfall event.		
		Conduct a survey of elevation points cecking for settlement, shifting [2].	Every five (5) years.		
		water standing on the final cover	Quarterly and after each major rainfall event.		
		Slumping or sloughing of final cover.	Quarterly and after each major rainfall event.		
Security Control Devices	Fences. Gates. Locks	Inspection for proper function.	Semiannually		
		Replace and repair as required.			
Gas Venting System	Risers	Inspect for plugging.	Semiannually		
Groundwater Monitoring Wells	Protective Tops Well	Inspect protective tops and seal for integrity and function.	Semiannually		
		Record well condition, including well depth, siltation, water depth, well pipe condition and water quality.	Semiannually		
Horizontal and Vertical Control	Benchmarks	Check for disturbance and remark (i.e., flag and/or paint).	Annually		
Groundwater Monitoring Wells	Survey	Survey stick-up once every five (5) years.	Every five (5) years.		
		Report elevation of the bottom of each monitoring well (Storet 72020).	Annually – report during second quarter sampling event.		

Notes:

1. Compare to Action Leakage Rate of 2,434 gallons per day for each Phase.
2. Compare survey elevations to original grading elevations and the elevations from previous surveys.

Table B-2
Post-Closure Maintenance Plan for CAMU Landfill

Equipment or Area	Description	Preventive Maintenance	Corrective Maintenance Procedures	Equipment Requirements	Material Needs
Leachate Collection System (LCS)	Side Slope Riser (SSR) Pump and Piping	Service pumps in accordance with the manufacturer's requirements.	Refer to O&M manual.	Refer to O&M Manual.	Refer to O&M Manuals.
		Clean pump according to the manufacturer's recommendations.	Repair leaks immediately upon discovery.	Refer to O&M Manual.	
		Clean interior piping annually.			
		Inspect liquid level sensor.	Refer to O&M manual.	Refer to O&M Manual.	
Leachate Detection System (LDS)		Service pumps in accordance with the manufacturer's requirements.	Refer to O&M manual.	Refer to O&M Manual.	Refer to O&M Manuals.
		Clean pump according to the manufacturer's recommendations.	Repair leaks immediately upon discovery.	Refer to O&M Manual.	
		Clean interior piping annually.			
		Inspect liquid level sensor.		Refer to O&M Manual.	
Final Cover	Surface Water Management System	Clean culverts of debris.	Correct erosion problems by installing erosion control devices.	Truck, bobcat, shovel.	Erosion mat, riprap, topsoil, etc.
	Cover Settlement		Fill settled areas and grade to drain.	Truck, small bulldozer,	Fill soil, topsoil, seed, fertilizer and mulch.
			Revegetate filled areas.	Seeder, landscaping tools.	
Final Cover	Vegetation Final Surface	Mow grass semiannually.	Repair eroded areas, fill with soil to grade, install erosion mat prior to seeding.	Truck small bulldozer,	Fill soil, topsoil, seed, fertilizer, mulch and erosion matting.
		Revegetate bare spots and eroded areas.	Seed, fertilize and mulch.	Seeder and mower.	

Table B-2, Post-Closure Maintenance Plan for CAMU Landfill *(continued)*

Equipment or Area	Description	Preventive Maintenance	Corrective Maintenance Procedures	Equipment Requirements	Material Needs
Berms	Exterior Berms	Mow grass semiannually.	Repair eroded areas by filling with soil to grading and adding erosion mat prior to seeding.	Track, small bulldozer,	Fill soil, topsoil, seed, fertilizer, mulch and erosion matting.
		Revegetate bare spots and eroded areas.	Seed, fertilize and mulch.	Seeder, landscaping tools.	
Environmental Monitoring Devices	Groundwater Monitoring Wells	Mark wells with flag to prevent damage during other maintenance.	Repair/replace broken protector pipes, surface seals and locks.	Shovel	Protector pipes, bentonite lock/key set, PVC pipe
Security Devices	Means to Control Entry	Repaint rusted or scratched areas.	Repair or replace worn or rusty fences.	Hand tools	Fence/gate parts and locks
	Exterior Lighting	Replace burnt out bulbs.			
Surface Water Management and Erosion Control Structures	Sedimentation Pond	Clean sediment from ponds.	Repair eroded inlet/outlet, dikes, etc.	Backhoe, truck, shovel	Fill soil, erosion control materials (e.g., riprap), pipes
		Remove debris from pipes and trash rock.	Repair eroded or silted in areas.		
			Clean trash rack, inlet and outlet pipes.		
	Ditches, Culverts, Spillways, etc.	Clean sediment from ditches.	Replace rusted culverts.	Backhoe, truck, shovels	Fill soil erosion control materials (e.g., riprap), pipes
			Repair eroded areas and install erosion control measures.		
Access Roads		Remove tracked mud.	Repair ruts, pot holes, etc.	Truck, shovels	Road gravel
Gas Vents	Gas Vents	Clean vents.	Repair, replace damaged vents and surface seals.	Shovel	Piping, glue, etc.

[1]To be compared with the action leakage rate of 2,434 gal/day per phase.

Table B-3
Post-Closure Repair Log for CAMU Landfill

Item	
Description of Planned Repair	
Date of Inspection/Discovery	
Name of Inspector	
Person Responsible for Repair	
Description of Completed Repair	
Date of Repair Initiation	
Date of Repair Completion	
Additional Comments and Follow up Actions	

ATTACHMENT B

CONSTRUCTION CERTIFICATION FORM

STATE ID # 1770200010

ILD005172325

Post-Closure Permit Log No. B-167R2

ATTACHMENT B

When submitting certifications required by this RCRA Post-Closure Permit for construction of any new unit, please complete the attached certification form. This will help to ensure that the submittal reaches its proper destination, and the certification will meet the regulatory requirements. Sending the Field Operations Section (FOS) copy directly to the FOS Office is acceptable as long as all copies have a completed copy of the enclosed form, and the Permit Section, is advised in writing, that a copy has been sent to the FOS Office.
A documentation report and as-built drawings (sealed and signed by a qualified Illinois licensed professional engineer) must be included with this certification. Information necessary to document the construction of the unit and to support the certification must be contained within the report. This report should include a thorough description of all construction data and drawings and should be formatted in a logical and orderly manner. The construction documentation report must contain at least the following items:

1. An introduction and summary which describes the scope and purpose of the project;

2. A description of all construction activities, including quality assurance and quality control;

3. As-built drawings of the unit and a description of any deviations from the plans and specifications approved in the Permit;

4. A description of the test methods used and justification for any deviations from standard test methods;

5. A summary of test results, identification of any samples which did not meet the specifications, and the corrective action and retesting which was undertaken in response to any failing test results;

6. Any necessary information associated with construction of the unit to document that construction was in accordance with the plans and specifications approved by the Permit;

7. Information specifically required by the Permit; and

8. Any available photographs of the unit.

CONSTRUCTION CERTIFICATION

This statement is to be completed by both the responsible officer and the qualified Illinois licensed professional engineer upon completion of construction in accordance with 35 IAC 702.126. Submit one copy of the certification with original signatures and two additional copies. Forward these certification statements and any information required by the Permit to the following address:

Illinois Environmental Protection Agency
Bureau of Land -- #33
Permit Section
2520 West Iles Avenue
P.O. Box 19276
Springfield, Illinois 62794-9276

FACILITY NAME: Modern Plating Corp.
IEPA SITE CODE: LPC No. 1770200010
USEPA ID NO.: ILD005172325
PERMIT LOG NO. B-167R2
PERMIT (OR MODIFICATION) ISSUANCE DATE:
PERMIT CONDITION NO. REQUIRING CERTIFICATION:

The _____ has been constructed in accordance with the specifications in the post-closure permit application. Documentation that the construction was in accordance with the Permit is contained in the enclosed report. I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

_____ Signature of Owner/Operator

_____ Name and Title

_____ Signature of Registered P.E.

_____ Name of Registered P.E. and Illinois Registration Number (P.E. Seal)

_____ DATE

ATTACHMENT C

APPROVED PERMIT APPLICATION IDENTIFICATION

STATE ID # 1770200010

ILD005172325

Post-Closure Permit Log No. B-167R2

ATTACHMENT C

IDENTIFICATION OF APPROVED PERMIT APPLICATION

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

Document	Date	Date Received
RCRA Post-Closure Permit Renewal Application	1/8/2021	1/8/2021
Revised Submission of RCRA Post-Closure Permit Renewal Application	5/7/2021	5/11/2021
Additional Information	5/30/2025	6/5/2025
Additional Information	7/29/2025	7/31/2025

ATTACHMENT D

CHRONOLOGICAL SUMMARY OF RCRA CORRECTIVE ACTION ACTIVITIES

STATE ID # 1770200010

ILD005172325

Post-Closure Permit Log No. B-167R2

ATTACHMENT D

CHRONOLOGICAL SUMMARY OF RCRA CORRECTIVE ACTION ACTIVITIES

The table below summarizes the corrective action activities completed to date at Modern Plating Corp. (Illinois EPA ID No. 1770200010, USEPA ID No. ILD005172325) under its RCRA Permit (Log B167, B167R, and associated modifications). This summary is based on a chronological presentation of the various letters sent by Illinois EPA.

Date of IEPA Letter and Log No.	**Brief Description of Action**
December 6, 1999 (Log No. C-259-M-8)	RCRA Part B application for proposed CAMU proposal for excavation of wetland Soils During the winter of 1999-2000 and contingency for CAMU volume.
December 22, 1999 (Log No. B-167)	Final RCRA closure plan and basis of design review letter – work plan for investigation of old outfall and sanitary sewer lines.
December 22, 1999 (No Log No. B-167)	Modern Plating Corp. CAMU contingency plan for volume increase.
January 6, 2000 (No Log No.)	Additional well data received.
January 13, 2000 (No Log No.)	Modern Plating Corp. CAMU contingency plan for volume increase, landfill stability analysis for volume increase is adequate.
January 17, 2000 (No Log No.)	RCRA closure modification request, IEPA approved the construction of a temporary storage unit.
January 31, 2000 (Log No. C-1597-99)	Responses to comments on the section 401 water quality certification application for the Modern Plating Corp. removal of hazardous materials from wetlands.
March 10, 2000 (No Log No.)	Additional comments on the draft RCRA part B Permit application for Modern Plating Corp.
March 23, 2000 (No Log No.)	Document release forms – required forms provided.
April 5, 2000 (Log No. B-167)	Request to revise the Modern Plating Corp RCRA part B Permit application RCRA log #B-167 and comments on the draft RCRA part B Permit – single RCRA part B permit placed on file.
April 6, 2000 (No Log No.)	Modern Plating Waste Water Treatment Plant application for Permit for construction approval – approval granted to begin in May, 2000.
April 17, 2000 (No Log No.)	Monitoring well installation documentation, MW-23B and MW-23C IEPA accept documentation of wells constructed along GMZ.

Date of IEPA Letter and Log No.	**Brief Description of Action**
May 5, 2000 (No Log No.)	Report on the phase I investigation of the abandoned outfall pipeline at the Modern Plating Corp property - response received on 6/8/2000. Response from the IEPA indicates that the Phase II work plan has been accepted.
May 17, 2000 (No Log No.)	Request for revised RCRA part B Permit for the Modern Plating Corp - request for revising the permit were accepted following the conditions set forth in the response.
July 7, 2000 (Log No. C-259-M-9)	Phase II investigation of the abandoned outfall pipeline at the Modern Plating Corp property, 1770200010-Stephenson County, Log No. C-259-M-9, RCRA closure - Response from the IEPA indicates that the Phase II work plan has been accepted.
August 18, 2000 (No Log No.)	Response to IEPA request for information concerning disposal in the CAMU landfill of remediation waste from a recent release at the Modern Plating Corp - response from the IEPA states that the recent release area will need to be classified as a SWMU.
November 1, 2000 (No Log No.)	Construction certification for Modern Plating Corp - response from the IEPA states Phase 2 was constructed in accordance with the approved plans.
December 6, 2000 (No Log No.)	Status of construction of the Modern Plating Corp CAMU landfill.
July 5, 2001 (No Log No.)	Construction certification for Modern Plating Corp., CAMU landfill phases 1 and 2 - certification received under review by IEPA.
August 3, 2001 (No Log No.)	Closure documentation report for Modern Plating Corp. - closure certification forms received and IEPA is reviewing closure documentation.
October 29, 2002 (No Log No.)	RCRA Class 1* Permit modification request for the Modern Plating Corp - clarification and permit modification received and being review by IEPA.
October 29, 2002 (No Log No.)	Clarifications for the Modern Plating Corp July, 2001 CAMU landfill construction documentation report, and August, 2001 closure documentation report - clarification received and being reviewed by IEPA.
December 6, 2002 (No Log No.)	Clarifications for the Modern Plating Corp closure documentation report (August 2001) - clarification received and being reviewed by IEPA.
December 13, 2002 (No Log No.)	Clarifications for the Modern Plating Corp closure documentation report dated August, 2001 - clarification received and being reviewed by IEPA.
September 8, 2003 (No Log No.)	RCRA Class 1* Permit modification for the Modern Plating Corp - modification requested, under review.

Date of IEPA Letter and Log No.	Brief Description of Action
December 30, 2003 (No Log No.)	Revised post-closure inspection and maintenance schedule - modification requested, under review.
December 31, 2008 (No Log No.)	RCRA Class 1* Permit modification request for the Modern Plating Corp - permit modification for post-closure permit received on May 7, 2009.
June 2, 2009 (No Log No.)	Groundwater Management Zone re-evaluation RCRA Post-Closure Permit IEPA#1770200010 Modern Plating Corporation, Freeport, Illinois.
March 1, 2010 (No Log No.)	Notice of Deficiency response - renewal Application for RCRA Part B Post-Closure Permit.
March 30, 2010 (No Log No.)	RCRA Part B Post-Closure Permit renewal application, response to Notice of Deficiency dated January 12, 2010, 1st completeness review - IEPA granted a RCRA post-closure permit renewal for CAMU 6/9/11.
March 30, 2010 (Log No. 167R)	Modem Plating Corporation, Freeport IL IEPA #1770200010, Log No. 167R RCRA Part B Post-Closure Permit Renewal Application Response to Notice of Deficiency Dated January 12, 2010, 1* Completeness Review - IEPA granted a RCRA post-closure permit renewal for CAMU in letter dated 6/9/11.
March 30, 2010 (No Log No.)	Draft Environmental Land Use Control - IEPA approved a draft ELUC in a letter dated 5/3/10 to modify the RCRA corrective action program and requested conditions and modifications.
June 10, 2010 (No Log No.)	Environmental Land Use Control - IEPA approved a ELUC in a letter dated 7/22/10 to modify the RCRA corrective action program with restrictions listed.
October 4, 2011 (No Log No.)	Class 1* Modification request - analysis of Impacts to MW-20C at Modern Plating Corporation, Freeport, Illinois.
September 12, 2019 (Log No. 167R-CA-1)	Resubmittal of Corrective Action certification form LPC 632 Groundwater Management Zone re-evaluation Log No. B167RCA1 RCRA Post-Closure Permit IEPA#1770200010 Modern Plating Corporation, Freeport, Illinois - IEPA responded to letters sent on 6/23/2020 and 8/28/2020 in a letter dated 10/16/2020 accepting the revised GMZ re-evaluation.
May 31, 2019 (No Log No.)	Groundwater Management Zone re-evaluation RCRA Post-Closure Permit IEPA#1770200010 Modern Plating Corporation, Freeport, Illinois – IEPA responded to letters sent on 6/23/2020 and 8/28/2020 in a letter dated 10/16/2020 accepting the revised GMZ re-evaluation.
April 3, 2020 (Log No. B-167R-CA-1)	Request for extension Groundwater Management Zone re-evaluation and related requirements Log No. B-167R-CA-1 RCRA Post-Closure Permit IEPA#1770200010 Modern Plating Corporation, Freeport, Illinois – IEPA accepted request for extension in a letter from Kenneth Smith dated 5/5/2020

Date of IEPA Letter and Log No.	**Brief Description of Action**
June /23/2020 (Log No. B167RCA1)	Revised Groundwater Management Zone re-evaluation Log No. B167RCA1 RCRA Post-Closure Permit IEPA#1770200010 Modern Plating Corporation, Freeport, Illinois - IEPA responded to letters sent on 6/23/2020 and 8/28/2020 in a letter dated 10/16/2020 accepting the revised GMZ re-evaluation.
8/28/2020 (Log No. B-167R-CA-3)	Addendum to revised Groundwater Management Zone re-evaluation Log No. B-167R-CA-3 RCRA Post-Closure Permit IEPA#1770200010 Modern Plating Corporation, Freeport, Illinois - IEPA responded to letters sent on 6/23/2020 and 8/28/2020 in a letter dated 10/16/2020 accepting the revised GMZ re-evaluation.

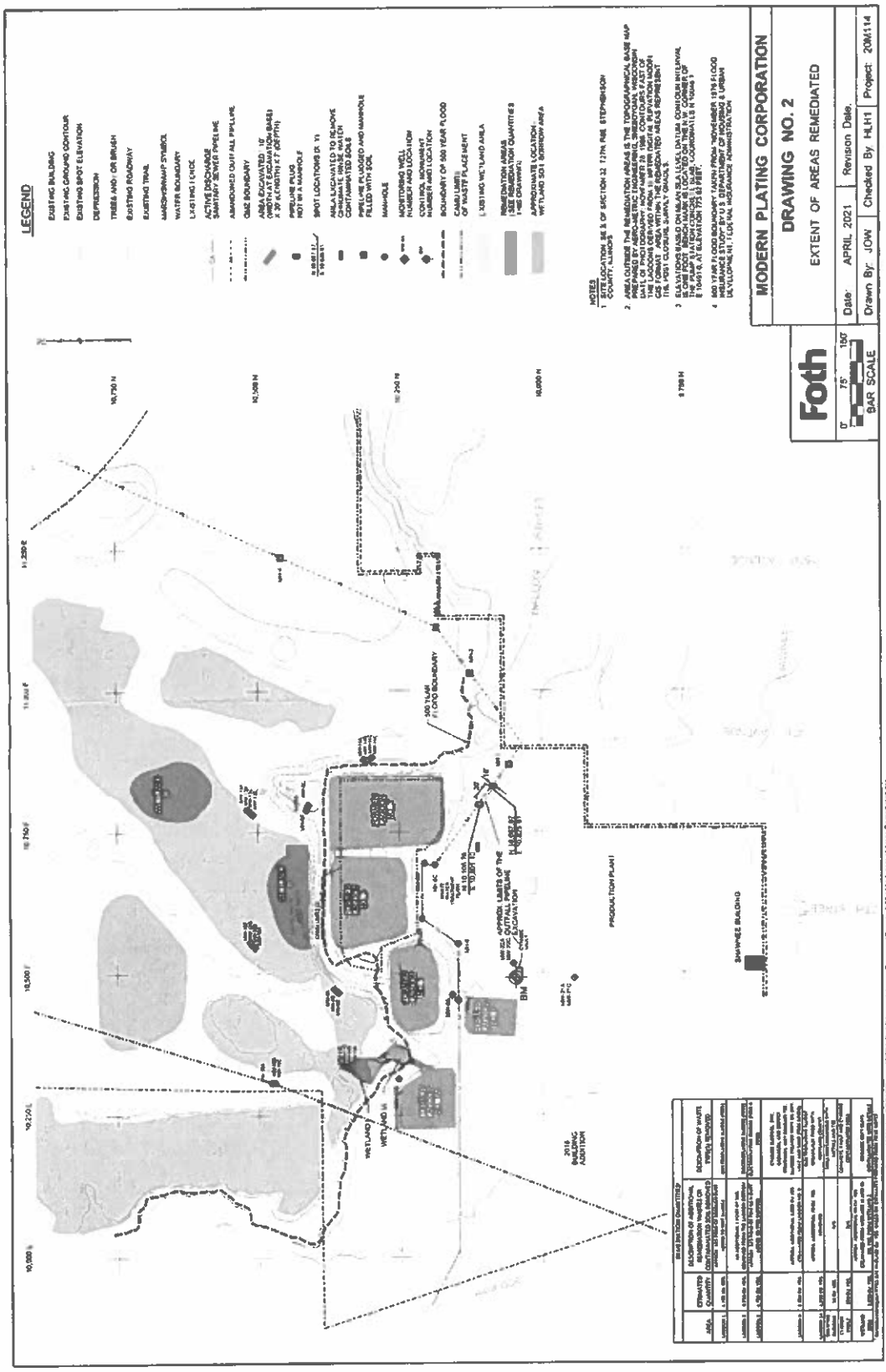
ATTACHMENT E

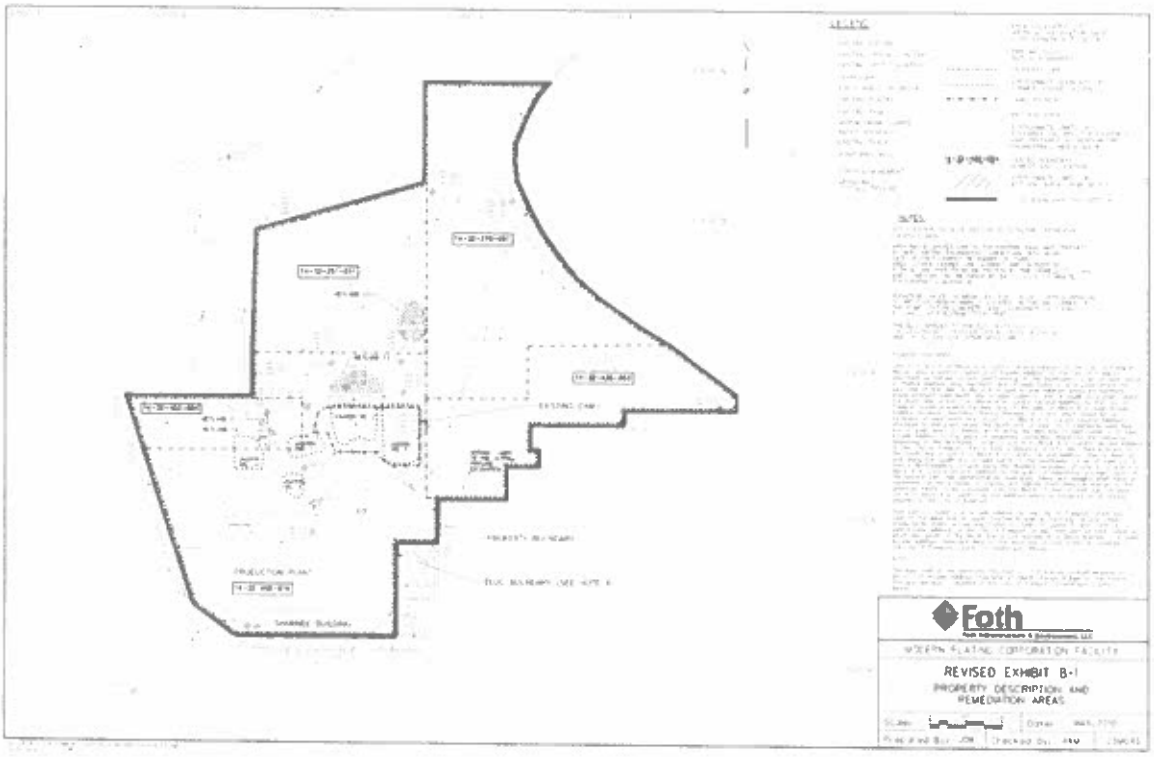
FACILITY MAPS

STATE ID # 1770200010

ILD005172325

Post-Closure Permit Log No. B-167R2


LEGEND
MODERN PLATING CORPORATION
DRAWING NO. 2
EXTENT OF AREAS REMEDIATED
Foth
Date: APRIL 2021
Revision Date:
Drawn By: JOW
Checked By: HLH1
Project: 20M114
BAR SCALE
0' 75' 150'
PRODUCTION PLANT
SHIPPING BUILDING
2018 BUILDING ADDITION
WETLAND
300 YEAR FLOOD BOUNDARY


Foth
REVISED EXHIBIT B-1
PROPERTY DESCRIPTION AND
REMEDIATION AREAS

ATTACHMENT F

CERTIFICATION OF COMPLETION OF POST-CLOSURE CARE

STATE ID # 1770200010

ILD005172325

Post-Closure Permit Log No. B-167R2

CERTIFICATION OF COMPLETION OF POST-CLOSURE CARE
Modern Plating Corp. (1770200010) – Stephenson County
USEPA ID: ILD005172325
RCRA Permit Log No. B-167R2

To meet the requirements of 35 Ill Administrative Code (IAC) 724.220, this statement is to be completed by both a responsible officer of the owner/operator (as defined in 35 IAC 702.126) and by a qualified Illinois licensed professional engineer upon completion of post-closure care of the UNIT NAME. Submit one copy of the certification with original signatures and two additional copies.

The hazardous waste management unit closed as a landfill, known as the Corrective Action Management Unit (CAMU), has been closed in accordance with the specifications in the approved closure plan. Post-Closure care required for the CAMU has been provided and completed in accordance with the RCRA Permit. A report documenting that required post-closure care have been carried out and completed in accordance with the approved post-closure care plan is attached.

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

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

Facility Name	**Printed Name of Responsible Officer**
Signature of Owner/Operator Responsible Officer **Date**	**Printed Title of Responsible Officer**
Signature of Licensed P.E. **Date**	**Printed Name of Licensed P.E. and Illinois License Number**
Mailing Address of P.E.:	**Licensed P.E.'s Seal:**

ATTACHMENT G

CORRECTIVE MEASURES PROGRAM REQUIREMENTS

STATE ID # 1770200010

ILD005172325

Post-Closure Permit Log No. B-167R2

ATTACHMENT G

CORRECTIVE MEASURES PROGRAM REQUIREMENTS

1.0 INTRODUCTION/PURPOSE

RCRA Corrective Action projects typically consist of two phases: (1) A RCRA Facility Investigation (RFI) where an investigation is conducted at the solid waste management units (SWMU's) of concern at a facility; and (2) implementation of corrective measures needed to properly address any contaminant encountered during the RFI. This document has been developed to outline the procedures to be carried out to implement a corrective measure program.

1.0 BRIEF OVERVIEW OF A RCRA CORRECTIVE MEASURES PROGRAM

Typically, at the end of an RFI, the concentration of contaminants present in the soil/sediments/groundwater/surface waters at a SWMU or other area of concern (AOC) is compared to remediation objectives developed in accordance with Title 35 Illinois Administrative Code (IAC) Part 742. If the contaminant levels are above these objectives, then some type of corrective measure must be completed to achieve these objectives. In addition, certain corrective measures may need to be carried out to support the established remediation objectives (i.e., the establishment of engineered barriers and/or institutional controls). However, at a unit where waste or high levels of contamination remains, a decision may be made to close the unit as a landfill and then provide post-closure rather than removing the material and/or achieving remediation objectives developed in accordance with 35 IAC Part 742.

To allow for a logical and orderly progression in developing and implementing necessary corrective measures, the Corrective Measures Program (CMP) being carried out in accordance with this RCRA Permit should be carried out in five phases which build on each other. It is not necessary for a CMP at a given SWMU or other AOCs to follow these five phases step-by-step; rather, phases can be combined and/or skipped, depending on the actual remedial measure selected. The overall CMP implemented must set forth a logical path for its implementation and allow for Illinois EPA oversight and approval throughout the entire process.

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

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

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

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

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

5. Phase V is the final demonstration/verification that the implemented corrective measure achieved the approved remedial objectives.

Sections 3.0 through 7.0 which follow provide a more detailed discussion of each of these five phases. Section 8.0 has been developed to describe the CMP which may be used in lieu of the afore-mentioned five phase procedure when soil removal is the selected remedy. It must be noted that work plans, reports, etc. must be developed to document how the Permittee carries out the required CMP at each SWMU or other AOCs. All such documents must be reviewed and approved by Illinois EPA prior to their implementation.

2.0 PHASE I OF THE CMP

Phase I of the CMP includes selection of the corrective measure to be taken and developing a basis for completing the final design of the measure. This effort should be documented in a Conceptual Design Report which describes the proposed corrective measure for each SWMU and other AOC and provides a conceptual design for these measures. The main criteria for the Illinois EPA review is whether the proposed corrective measures are able to achieve the final cleanup objectives previously established by the Permittee and the Illinois EPA and/or provide the necessary institutional controls to prevent the migration of contaminants from the SWMU of concern. Based upon a review of the Conceptual Design Report, the Illinois EPA may approve the corrective measures, require revisions to the proposed corrective measures, or require that a totally new corrective measures proposal be submitted to the Illinois EPA.

The Conceptual Design Report should contain the following sections:

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

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

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

4. Corrective Measures Objectives. This section should discuss the general objectives of the proposed corrective measure to be constructed/installed, and the ability of the proposed corrective measure to achieve the established remediation objectives (unless the selected corrective measure is closure as a landfill which will require proper establishment of a final cover and proper post-closure care of the closed unit).

5. Identification of Options Available. This section should contain a brief discussion of the various options available to achieve the corrective measures objectives for each unit. This discussion should identify: (1) a general overview of each option available, including how the option will achieve the stated objective; (2) the advantages associated with each option; (3) the disadvantages associated with each option and (4) an estimate of the cost associated with choosing each remedial option.

6. Description of Selected Corrective Measure. This section should contain a qualitative discussion of the corrective measure chosen, along with the rationale which was used to select this measure from all those identified initially. This discussion should include documentation that the selected corrective measure will be effective.

7. Identification of Design Criteria. This section should identify what information must be available to design the selected corrective measure.

8. Review of Available Information. This section should contain an evaluation of the existing information to ensure that it is sufficient to complete the design of the selected corrective measure. If insufficient information is available, then the report should contain procedures for collecting the required additional information.

9. Procedures for Completing the Design. This section should contain a description of the procedures which will be followed to complete the design of the corrective measure. This should include as appropriate:

    a. Identification of the references and established guidance which will be used in designing the selected corrective measure. Justification for the selection of this procedure should also be provided.

    b. A description of the procedures which will be used to complete the design of the corrective measure.

    c. Identification of assumptions to be used in the design, and the impact these assumptions have on the overall corrective measure;

    d. Significant data to be used in the design effort;

e. Identification and discussion of the major equations to be used in the design effort (including a reference to the source of the equations);

f. Sample calculations to be used in the design effort;

g. Conceptual process/schematic diagrams;

h. A site plan showing a preliminary layout of the selected corrective measure;

i. Tables giving preliminary mass balances;

j. Site safety and security provisions.

This information will form the technical basis for the detailed design of the remedial measure and the preparation of construction plans/specifications.

10. Identification of Required Permits. This section should identify and describe any necessary Permits associated with the selected corrective measure, as well as the procedures which will be used to obtain these Permits.

11. Long lead Procurement Considerations. This section should identify any elements/components of the selected corrective measure which will require a large amount of time to obtain/install. The following issues should also be discussed: (1) the reason why it will take a large amount of time to obtain/install the item; (2) the length of time necessary for procurement and (3) recognized sources of such items.

12. Project Management. This section should contain information regarding the procedures and personnel which will be involved in completing the design of the selected corrective measure. A schedule for completing the design should also be provided.

3.0 PHASE II OF THE CMP

Once the Illinois EPA approves the Conceptual Design Report, the facility should complete the design of the approved corrective action (Phase II of the CMP). Upon final completion of the design, a Final Design Report, consisting of final plans, specifications, construction work plan, etc., must be submitted to the Illinois EPA for review and approval.

Several documents must be submitted to the Illinois EPA as part of Phase II of the CMP. The following text describes the expected contents of the various documents which should be developed and submitted to the Illinois EPA as part of Phase II of the CMP.

1. Final Design Report and Construction Work Plan. The Final Design Report and Construction Work Plan must contain the detailed plans, specifications and drawings needed to construct the corrective measure. In addition, this document must contain: (1) calculations, data etc., in support of the final design; and (2) a detailed description of the overall management strategy, construction quality assurance procedures and schedule for constructing the corrective measure. It must be noted that the approved Conceptual Design Report forms the basis for this final report. The information which should be provided in this document includes:

   a. Introduction/Purpose. This portion of the document should: (1) provide background information regarding the project, (2) describe the purpose and goals of the project, and (3) describe the scope of the project.

   b. Detailed Plans of the Design System, including the following:

      1) Plan views;

      2) Section and supplementary views which, together with the specifications and general layouts, facilitate construction of the designed system;

      3) Dimensions and relative elevations of structures;

      4) Location and outline form of the equipment;

      5) Ground elevations; and

      6) Descriptive notations, as necessary, for clarity.

   c. Technical Specifications. Complete technical specifications for the construction of the system, including, but are not limited to, the following:

      1) All construction information, not shown in the drawings, which is necessary to inform the contractor in detail as to the required quality of materials, workmanship, and fabrication of the project;

      2) The type, size, strength, and operating characteristics of the equipment;

      3) The complete requirements for all mechanical and electrical equipment, including machinery, valves, piping and jointing of pipe;

      4) Electrical apparatus, wiring and meters;

      5) Construction materials;

      6) Chemicals, when used;

7) Miscellaneous appurtenances;

8) Instruction for testing materials and equipment as necessary; and

9) Availability of soil boring information.

d. Project Management. A description of the construction management approach, including the levels of authority and responsibility, lines of communication and qualifications if key personnel who will direct corrective measures construction/installation must be provided in the work plan.

e. Construction Quality Assurance/Quality Control. A construction quality assurance/quality control plan describing the procedures which will be followed to ensure the corrective measure is constructed/installed in accordance with the approved plans and specifications.

f. Schedule. The work plan must contain a schedule for completion of all major activities associated with construction/installation of the selected corrective measures. All major points of the construction/installation should be highlighted.

g. Waste Management Practices. This portion of the document should identify the wastes anticipated to be generated during the construction/installation of the corrective measures and provide a description of the procedures for appropriate characterization and management of these wastes.

h. Required Permits. Copies of permit applications submitted to other Bureaus of the Illinois EPA for the selected corrective measure must be provided in the report. If it is determined that no Permit is required for construction/installation and implementation of the corrective measures, rationale and justification must be provided to support this contention.

i. Cleanup Verification. The report must contain the procedures which will be followed that the approved remediation objectives have been achieved when operation of the system is completed.

2. Operation and Maintenance Plan. An Operation and Maintenance Plan must be developed and submitted as part of Phase II of the CMP. This plan should outline the procedures for performing operations, long term maintenance, and monitoring of the corrective measure.

a. Introduction and Purpose. This portion of the document should provide a brief description of the facility operations, scope of the corrective measures project, and summary of the project objectives.

b. System Description. This portion of the document should provide a description of the corrective measure and significant equipment, including manufacturer's specifications. This portion of the Permit should also include a narrative of how the selected system equipment is capable of complying with the final engineered design of the corrective measure.

c. Operation and Maintenance Procedures. This portion of the document should provide a description of the normal operation and maintenance procedures for the corrective measures system, including:

1) Description of tasks for operation;

2) Description of tasks for maintenance;

3) Description of prescribed treatment or operation conditions; and

4) Schedule showing the frequency of each operation and maintenance task.

d. Inspection Schedule. This portion of the document should provide a description of the procedures for inspection of the corrective measures system, including problems to look for during the inspection procedure, specific inspection items, and frequency of the inspections.

e. Waste Management Practices. This portion of the document should provide a description of the wastes generated by the corrective measure, and the appropriate procedures for proper characterization/management of these wastes.

f. Contingency Procedures. This portion of the document should provide a description of the procedures which will address the following items:

1) System breakdowns and operational problems including a list of redundant and emergency backup equipment and procedures;

2) Alternative procedures (i.e., stabilization) which are to be implemented in the event that the corrective measure fails. The alternative procedures must be able to prevent release or threatened releases of hazardous wastes/hazardous constituents which may endanger human health and the environment or exceed cleanup standards.

3) Notification of facility and regulatory personnel in the event of a breakdown in the corrective measures, including written notification identifying what occurred, what response action is being taken and any potential impacts on human health and the environment.

4.0 PHASE III OF THE CMP

Once the final design report is approved by the Illinois EPA, construction/installation of the approved corrective measure must commence. During this period, quarterly reports should be submitted which contain the following information:

1. Summary of activities completed during the reporting period;

2. An estimate of the percentage of the work completed;

3. Summaries of all actual or proposed changes to the approved plans and specifications or its implementation;

4. Summaries of all actual or potential problems encountered during the reporting period;

5. Proposal for correcting any problems; and

6. Projected work for the next reporting period.

Upon completion of construction/installation of the approved corrective measure, a Construction Completion Report must be submitted to the Illinois EPA documenting that these efforts were carried out in accordance with the Illinois EPA approved plans and specifications. This report should contain a thorough description of the efforts that went into constructing/installing the corrective measure and demonstrate that the procedures in the Illinois EPA approved Final Design Report were followed during this effort. Such a report should be formatted in a logical and orderly manner and contain the following information:

1. An introduction discussing the background of the project and the purpose and scope of the corrective measure described in the report.

2. Identification of the plans, technical specifications and drawings which were used in constructing/installing the corrective measure. These specifications and drawings should have been approved by the Illinois EPA during Phase II.

3. Identification of any variations from the Illinois EPA approved plans, technical specifications, and drawings used in construction/installing the corrective measure. Justification regarding the need to vary from the approved plans and specifications must also be provided.

4. A description of the procedures used to construct/install the corrective measure, including the procedures used for quality assurance and quality control.

5. As built drawings, including identification of any variations from the approved plans, technical specifications, and drawings.

6. A summary of all test results from the construction/installation effort, including quality assurance/quality control testing.

7. Actual test results, including quality assurance/quality control test results. These results should be located in an attachment/appendix and be well organized.

8. Identification of any test results which did not meet the specified value and a description of the action taken in response to this failure, including retesting efforts.
9. Photographs documenting the various phases of construction.

10. A detailed discussion of how the construction/installation effort met the requirements of the approved Final Design Report.

11. A certification meeting the requirements of 35 IAC 702.126 by a qualified Illinois licensed professional engineer and by an authorized representative of the owner/operator.

5.0 PHASE IV OF THE CMP

Once the corrective measure has been constructed/installed, it must be operated, maintained, and monitored in accordance with the approved plans and specifications (this is Phase IV of the CMP). During this period, quarterly reports must be submitted to the Illinois EPA documenting the results of these efforts. These reports include the following:

1. Introduction. -- A brief description of the facility operations, scope of the corrective measures project, and summary of the project objectives.

2. System Description. -- A description of the corrective measures constructed/installed at the site and identify significant equipment. Describe the corrective measure and identify significant equipment.

3. Monitoring Results. -- A description of the monitoring and inspection procedures to be performed on the corrective measures. A summary of the monitoring results for the corrective measures, including copies of any laboratory analyses which document system effectiveness, provide a description of the monitoring procedures and inspections performed, and include a summary of the monitoring results for the corrective measure. Copies of all laboratory analytical results which document system monitoring must be provided.

4. Effectiveness Determination. -- Calculations and other relevant documentation which demonstrates the effectiveness of the selected corrective measure in remediating/stabilizing contamination to the extent anticipated by the corrective measures final design. Copies of relevant analytical data should be provided to substantiate this determination.

5. System Effectiveness Recommendation. -- Based upon the results of the effectiveness determination required under Item 4, recommendations on continued operation of the corrective measure must be provided. If the corrective measure is not performing in

accordance with the final design, a recommendation on revisions or expansion of the system should be provided.

6.0 PHASE V OF THE CMP

Once all corrective measures have been completed, a report must be developed documenting all the efforts which were carried out as part of implementing the corrective measure and demonstrating, as appropriate, that the approved remediation objectives have been achieved. This report should contain a compilation of all previous reports and contain sufficient information to demonstrate that the approved remediation objectives have been achieved. It must be noted that such a report will not be developed for a unit closed as a landfill until the post-closure care period has been completed.

7.0 PROCEDURES WHICH SHOULD BE FOLLOWED WHEN SOIL REMOVAL IS THE SELECTED CORRECTIVE MEASURE

Sections 3.0 through 6.0 above describe the procedures which should be followed when it is necessary to design a physical corrective measure (e.g., a final cover system, some type of treatment system, etc.). However, such detail is not necessary if excavation/removal is selected as the remedial action for the contaminated soil encountered at the site. In general, a work plan should be developed for this effort (for Illinois EPA review and approval) which fully describes each step to be used in removing the contaminated soil from the property. This includes a description of (1) the equipment utilized in the removal effort, (2) the pattern followed in removing the soil; (3) the depth to which the soil will be removed; (4) management of the soil on-site after it is removed from the ground; (5) loading areas; (6) the ultimate destination of the soil; and (7) any other steps critical to the removal effort.

One way to conduct a soil removal effort is to collect and analyze a sufficient number of soil samples to clearly determine the horizontal and vertical extent of soil contamination prior to conducting the soil removal effort. The boundaries of soil which must be removed are defined by the Illinois EPA established cleanup objectives for the project. Soil excavation must extend to sample locations where soil test results indicate that the remediation objectives are met. Closure verification sampling is not necessary in such cases, if a qualified Illinois licensed professional engineer oversees the soil removal effort and certifies that the remediation limits extend to these boundaries.

Another way to conduct a soil removal effort is to collect and analyze a limited number of soil samples prior to the soil removal effort and to rely mainly on field observation to determine the extent of the soil removal. In such cases closure verification sampling is necessary. Soil samples must be collected for analysis from the bottom and sidewalls of the final excavation. The following sampling/analysis effort is necessary to demonstrate that the remaining soil meets the established cleanup objectives:

1. A grid system should be established over the excavation.

2. Samples should be collected from the floor of the excavation at each grid intersection, including intersections along the perimeter of the excavation.

3. Samples should be collected at six inches to 12 inches below the ground surface (bgs) along the excavation sidewalls at each grid intersection around the excavation perimeter. Samples must also be collected at the midpoint of the excavation wall at each grid intersection along the excavation perimeter.

4. Collection/analysis of all required samples must be in accordance with the procedures set forth in the approved plan.

5. Soil samples which must be analyzed for volatile organic compounds (VOCs) must be collected in accordance with the procedures set forth in Method 5035 of SW-846. In addition, such samples must be collected six inches to 12 inches beneath the floor/sidewalls of the excavation to minimize the possibility of volatilization of the contaminants prior to the collection of the samples.

6. No random sampling may be conducted to verify achievement of cleanup objectives have been met.

7. Additional soil must be removed, as necessary, until it can be demonstrated that the remaining soil in and around the AOC meets the established cleanup objectives. Additional samples must be collected and analyzed in accordance with the procedures described above from areas where additional soil has been removed.

ATTACHMENT H

LEACHATE ANALYTICAL PARAMETERS

STATE ID # 1770200010

ILD005172325

Post-Closure Permit Log No. B-167R2

ATTACHMENT H

TABLE 1

Sample Parameters

Parameter	Cas No.	ICP/MS	Reporting Units
Boron	7440-42-8	EPA-6020A	mg/L
Cadmium	7440-43-9	EPA-6020A	mg/L
Chromium	7440-47-3	EPA-6020A	mg/L
Cobalt	7440-48-4	EPA-6020A	mg/L
Cooper	7440-50-8	EPA-6020A	mg/L
Iron	7439-89-6	EPA-6020A	mg/L
Lead	7439-92-1	EPA-6020A	mg/L
Manganese	7439-96-5	EPA-6020A	mg/L
Magnesium	7439-95-4	EPA-6020A	mg/L
Mercury	7439-97-6	EPA-6020A	mg/L
Nickel	7440-02-0	EPA-6020A	mg/L
Potassium	7440-09-7	EPA-6020A	mg/L
Silver	7440-22-4	EPA-6020A	mg/L
Sodium	7646-69-7	EPA-6020A	mg/L
Thallium	7440-28-0	EPA-6020A	mg/L
Zinc	7440-66-6	EPA-6020A	mg/L
Total Metals	--	EPA-6020A	mg/L
VOC Scan	--	EPA-8260	ug/L
PaHs	--	EPA-550	ug/L
Chloride	--	325.2/325.3	mg/L
Fluoride	--	340.1/340.2	mg/L
Nitrate	--	353.2/353.4	mg/L
Sulfate	--	375.4/375.2	mg/L
Cyanide	57-12-5	SM4500CN C/SW9012A	mg/L
BOD	--	SM5210B	mg/L
TSS	--	SM2540D	mg/L
pH	--	150.1/150.2	S.U.
Alkalinity	--	EPA-310.2	

*Some parameters may be combined in a sample bottle determined by the analytical lab