RCRA Review Notes

REVIEW NOTES CHECKLIST
General Information

1770200010 – Stephenson County
Modern Plating Corporation
ILD005172325
Log No.: B-167R2

Start of Review (Date)	**2/24/25, 7/24/2025**	
Project Manager	Takako Halteman, P.E. 7/31/25	
Groundwater Unit Reviewer	Aidan Fullriede	
Corr. Action Reviewer	Takako Halteman, P.E.	
Brief Description of Project	Renewal application for a post-closure hazardous waste Permit	
Site Name/Location	Modern Plating Corporation 701 South Hancock Avenue Freeport, IL, 61032-0838	
Facility Contact ☒ - Operator ☐ - Owner	Modern Plating Corporation Attn: Brandon Smith, President/CEO 701 South Hancock Avenue P.O. Box 838 Freeport, IL, 61032-0838	Phone #: (815) 235-3111 Email: brandon.smith@modernplating.com
Owner ☐ - Same as Facility Contact	Modern Plating Corporation Attn: David Servatius, Owner 701 South Hancock Avenue P.O. Box 838 Freeport, IL, 61032-0838	Phone #:(815) 235-3111 Email: dave.servatius@modernplating.com
Consultant	Foth Infrastructure and Environment, LLC Attn: Heather Hallett, Lead Hydrogeologist 2121 Innovation Court, Suite 100 P.O. Box 5095 De Pere, WI 54115-5095	Phone #: (920) 496-6912 Email: heather.hallett@foth.com
Forms, Certifications and Original Signatures	☒- All required forms are provided with the application. ☐- Professional Engineer and Licensed Professional Geologist have provided a certification statement and seal as required. * ☒- Original signatures present on all documents/forms provided with application. * * Original signatures/seals are not required on additional copies of the application.	
Siting (Sec. 3.330 of Act) Cert. of Siting (LPC-PA8)	Has siting for facility been approved: ☐-Yes ☐-No ☒-NA	

Environmental Justice Evaluation (See Procedure I.28) EJ Start EJ Review Request Webpage EJ Review Request System Guide	Determine if the submittal requires an Environmental Justice (EJ) evaluation, if so use the EJ Start webpage to determine if the facility is located within an EJ area. See BOL Permit Procedure I.28 for information on applicability, and performing an EJ evaluation. See the EJ Review Request System Guide for information on submitting an EJ Review Request. a. EJ Evaluation Required: ☒-Yes ☐-No b. EJ SWAP Results: ☐-Not in an EJ Area ☐-Blue (1) Minority ☒-Yellow (2) Low Income ☐-Red (3) Minority & Low Inc. c. EJ Review Request: If the facility is in an EJ area submit an EJ Review Request to the EJ Office using the EJ Review Request webpage. d. **Final** EJ Office Evaluation Response: (**Note:** Projects with an EJ status of "Outreach in Progress" will not be signed by the Permit Section Manager). ☒-Complete – No Outreach ☐-Complete – With Outreach e. Documentation: Emails from EJ Office documenting the EJ review should be attached to review notes. Notes: **EJ Outreach letter was issued on March 21, 2024**
39(i) Certification 39(i) Cert. form (LPC 643) **a. Review** (See BOL Adm. Procedure I.25, 39(i) Investigations Memo & Sec. 39(i) of the Act)	☐-Not Applicable as this is not an application for a RCRA permit, permit modification, waste storage site, landfill/disposal site, transfer station, treatment facility, incinerator, waste transportation, CCDD fill operation, or tire storage site. **Review of 39(i) Certification**: **I. Applicant Information**: ☒-Complete/adequate ☐-Not complete/not adequate **Submitted signed 7/29/2025** **II. Officers & Employees**: ☒-Complete/adequate ☐-Not complete/not adequate **III. Owner, Operator, Officer, and Employee Information**: A. Prior Conduct Identification: ☐-Yes ☐-No: Are one or more of the questions in this section marked "Yes"? If so, an Attachment A must be included (see below). B. Pending Proceedings: ☐-Yes ☐-No: Are one or more of the questions in this section marked "Yes"? If so, an Attachment A must be included (see below). C. Prior Application Information: i. ☐- Yes ☐-No: Are Previously submitted Attachment A's incorporated into this Certification? ii. ☐- Yes ☐-Not complete/adequate: If C.i. is checked yes; are the applications containing the previously submitted Attachment A's identified?

	Certification Statement: ☒-Yes ☐-Not complete/not adequate: Has the certification been signed by responsible corporate officer who meets the requirements of 702.126(a)(1)? **Attachment A – Information for Individual Persons:** Required if item III A. and/or B. above is check Yes. ☐-N/A ☐-Yes ☐-Not complete/adequate: Attachment A has been completed and contains the required information for individuals, identified in Section II that have prior findings, convictions or pending proceedings.
b. FACES Database Review FACES-DB FACES – 39i Guidance FACES User Manual	☒-Yes ☐-No: Facility has more than two consent decrees. If "Yes" request Full Compliance History (FCH), see item c. below. Notes:
c. Full Compliance History (FCH) Review	FCH Requested: ☐-Yes ☒-N/A: If item b above is checked yes, request a full report of the site compliance history for the facility from the Waste Reduction and Compliance Section Manager.[1] Date FCH request made:
d. Other Information	**Other Information:** ☐-Yes ☒-No: Other information has been identified that suggest that applicant has not been truthful, or information provided is incomplete. Other information can be from public comments, news reports, personal knowledge, etc.
e. 39i violations identified that may require permit denial.	☐-Yes ☒-No: 39i violations Identified that may require permit denial. If yes, a memo to the Unit Manager should be prepared detailing the violations. i. ☐-A memo, dated _____, has been forwarded to the Unit Manager for evaluation.
f. Revised Permit Condition for 39(i)	☒-Yes ☐-N/A: Permit Condition V.A _____ has been revised to require the submittal of 39(i) Certification Forms with all applications (see item 4 of BOL Adm. Procedure I.25).
Field Office Section	a. FOS Region/Contact: Maxwell G. Boes Email: Maxwell.Boes@Illinois.gov Phone: (815) 987-4961 b. Field Inspection Required: ☐-Yes ☐-No If yes, a memo/email should be prepared and sent to the FOS contact, copy FOS Regional Manager. i. ☒-A memo/email, dated 7/24/2025 has been forwarded to the FOS c. Comments Received from FOS: ☒-Yes ☐-No Email 7/25/2025

[1] See item 2 of June 26, 2018 39(i) Investigations Memo

CROPA Memo Procedure I.31 CROPA Template	a. ☐-Yes ☒-No : CROPA Memo distributed on _____. i. ☐-Yes ☒-No: Permit(s) from other Bureaus required.
Change of Basic Facility Information (Change of: Name, Owner/Operator, Contact Information, etc.)	a. ☐-Yes ☒-No If yes: i. Facility with BOL ID/Inventory Number only (Non-RCRA Facility): ☐-Reviewer has completed Site Inventory Data Input Form **-OR-** ☐-Facility has submitted an IEPA Inventory Application Form. ii. Facility with a Federal (RCRA) ID Number : ☐- Facility has submitted a revised Notification of Regulated Waste Activity Form (USEPA Form 8700-12).
Right-to-Know (RTK) Evaluation Sec. 25d of Act Right-to-Know Evaluation Form (2/2025)) Contaminant Evaluation Group (CEG) Referral Form (2/2025) IEPA Right-to-Know Website	A Right-to-Know (RTK) evaluation must be performed for any review in which soil, soil gas and/or groundwater contamination data is reviewed. a. ☒-N/A No release near the property boundary has been documented. b. ☐-RTK Evaluation performed , RTK Evaluation Form attached. c. Soil, soil gas and/or groundwater contamination were evaluated. The evaluation determined: • ☐-Further evaluation required and Item d below must be completed. • ☐-Additional information is required to make an evaluation. • ☐-No criteria met; site does not warrant further evaluation. d. ☐-Right-to-Know Evaluation Form required a CEG Referral Memorandum be completed and sent to Community Relations RTK Coordinator. Memo sent on date: _____ e. ☐-Other: Right-to-Know Evaluation Form completed, met criteria for referral to CEG but was not required based on: _____ Notes:

RCRA Permit, RCRA Corrective Action, & RCRA Closure Submittals USEPA RCRAInfo Database IEPA RCRAInfo Data Entry Guidance (Draft) USEPA R1 RCRAInfo Data Entry Walk Through USEPA Comprehensive RCRAInfo Help & Guidance USEPA RCRAInfo Data Element Dictionary	☐- N/A: Submittal(s) is not a RCRA Permit, RCRA Closure or RCRA Corrective Action Submittal. a. ☐- RCRA Info: Enter data into the USEPA RCRAInfo Database for RCRA permits, permit modifications, RCRA Closure and Corrective Action submittals as required. See linked documents to the left for additional guidance. b. ☐-Yes ☐-No ☐-N/A: Permit Modification Class Correctly Identified: The submittal has been properly classified by the applicant i.e., as a Class I, Class I*, Class II or Class III modification (35 IAC 703.280) or as a Corrective Action submittal. If the permit class was not correct: • ☐- Admin Support was contacted to correct the permit class in the RCRA Database, and the Tracking Sheet was updated and was redistributed to the FOS regional office and other staff. • ☐-Yes ☐-N/A: If necessary, the applicant has been notified of the change in the permit modification Class of the submittal. (35 IAC 703.280(d)(2)(A); 703.282(f)).

REVIEW NOTES
1770200010 – Stephenson County
Modern Plating Corporation
ILD 005 172 325
Log No. B-167R2

-TNH 8/1/25

Subject Submittals:

1. "RCRA Part B Permit Application", dated May 7, 2021 and recived by Illinois EPA on January 8, 2021. This permit renewal application was submitted by Heather L. Hallett, Micheal Raimonde, and Andrea Martin, P.E, of Foth, on behalf of Modern Plating Corp.

2. "Response to Notice of Incompleteness regarding Renewal Application for RCRA Part B Post-Closure Permit", dated May 7, 2021, and recived by Illinois EPA on May 11, 2021. This additional information to the permit renewal application (Submittal No. 1 above) was submitted by Heather L. Hallett, Micheal Raimonde, and Andrea Martin, P.E, of Foth, on behalf of Modern Plating Corp.

3. Revised LPC-PA-23 Form, submitted by Modern Plating and recived by Illinois EPA on June 5, 2025. Along with the form included were: Drawing 12 in Attachment C (Closure documentation report), Part A form, Fire Inspection Report and Figure G to show the locations of fire extinguisher (incorporated into to Attachment I) of the application.

4. Updated 39i, dated July 29, 2025, submitted by Modern Plating and received by Illinois EPA on July 31, 2025.

TNH July 2025 Disclaimer:

1. The review notes included in this document include the documentation of the application review conducted by Lina Shen, followed by review and revisions made by Takako Halteman, P.E, RCRA Unit Manager (TNH here after). Some of the review comments made by TNH are based on reviews and inputs from Collier Sanders, and Curtis Samson, P.E; however, any final decisions incorporated into the review notes and the draft permit associated with the subject application have been reviewed and confirmed by TNH.

2. Any further evaluation and verification of the technical information not included in the permit application, which are essentially considered deficient. Any additional revisions and submittals of addendum application for the specific items required will be included as compliance schedule to be submitted to Illinois EPA in the Special Conditions (Section V) of the draft permit. This decision is made based on the fact that: (1) this a post-closure care permit (i.e. no currently operating units regulated by this permit, other than a closed CAMU); (2) as a post-closure of the CAMU is being currently operated and would need to continue to be operated regardless of the permit application deficiencies, it is more efficient, streamlined, and protective/restrictive to require additional information necessary under a compliance schedule than another cycle of notice of deficiencies (NODs) and delay the issuance of the renewed permit; (3) the renewed permit will include the updated standard conditions that reflect current evaluation of the unit closed with waste in place, so that issuance of this renewed permit will lead to providing more protection of human health and the environment; and (4) this permit is one of the Illinoi EPA's high priority permit for renewal.

3. Section C and any other items in application that are associated groundwater related activities at the site were not reviewed by INH. Please refer to Groundwater unit's review notes on those items.

Section I: Facility and RCRA History of Modern Plating Associated with CAMU

1. Background

In 2000/2001, for the purpose of implementing remedies under 35 IAC 724.201, the Illinois EPA designated a new unit at the Modern Plating facility as a permanent Corrective Action Management Unit (CAMU). The CAMU was closed in 2001 with hazardous waste left in place. 35 IAC 702.121 requires facilities that have closed a hazardous waste management unit as a landfill to obtain a RCRA post-closure permit.

The post-closure permit (Log No. B-167R) for the facility would be expired on July 7, 2021. A remind letter was sent to Modern Plating Corporation on June 23, 2020. The letter asked for the submittal of renewal application for the subject permit before January 8, 2021. Two documents were attached with the letter: "*Information Which Must be Provided in an Application for a RCRA Post-Closure Permit, November 2019*" and a checklist titled "*RCRA Post-Closure Permit Application Completeness and Technical Review Checklist, November 2019*". The following forms are required in accordance with the remind letter:

(1) An LPC-PA23 form signed by the owner, operator and a qualified professional engineer; and

(2) a 39(i) certification and all supporting documentation.

Renewal Part B Permit application was received on 01/08/2021. The completeness review of this submittal was conducted by Mark L. Crites. Three (3) completeness deficiencies were identified. The groundwater aspects of this submittal were reviewed by Paula Stine and eight (8) completeness deficiencies were identified. On May 7,2021, the facility submitted additional materials in response to the Notice of Incompleteness

This review is based on the attachment, "*Information Which Must be Provided in an Application for a RCRA Post-Closure Permit May 2021"* as it was provided to the facility as a guidance for developing the renewal permit application.

2. Pertinent Site History

The facility, located at 701 South Hancock Avenue in Freeport, Illinois. has operated as an electroplater since 1963 and is a job-shop plating business with the capabilities to plate a variety of metals. The area is surrounded by a mixture of residential and commercial properties to the south, east, and west. Agricultural property and wetlands exist between the Modern Plating Corporation (MPC) facility and the Pecatonica River located to the north of the facility. In 1965-1966, MPC planned to prepare for waste treatment in the area northeast of the plant taking advantage of natural grade. In 1968-1969, an underground room (20feet by 15 feet*12feet deep) was created and a wastewater treatment system was installed. During the 1965-1970 period, three separate environmental projects were undertaken. First, several

acres to the north of the facility were filled into present grade. Secondly, engineering plans were produced for a large wastewater treatment plant on the present site. In order to commence storing untreated sludge, a clay-lined impoundment constructed in clay soils (Lagoon No. 0), using 2-feet to 3-feet of partially compacted clay was created northwest of the office. The lagoon was approximately 50-feet by 50-feet by 15-feet deep. Various cyanide sludges and zinc, cadmium, and copper stripping were added, as well as limited amounts of alkaline sludge. There may have been trichloroethene-containing waste added to Lagoon No.0. Around the summer of 1970, the lagoon was closed.

In the spring of 1971, the west lagoon (Lagoon No. 1) was constructed in a clay soil environment. In May of 1971, the current wastewater treatment plant was put into operation with simultaneous closure of the underground treatment system. The sludges in the cyanide treatment basin, chromium treatment basin and acid-alkali neutralization basin were pumped through the new wastewater treatment plant to Lagoon No 1. Because of high water contain of clarifier sludge, The lagoon filled quite rapidly and was overflowing by mid-1972. In the spring of 1973, the center lagoon (Lagoon No.2) was constructed in a clay soil environment and immediately put into service. From 1973 through 1979, the waste treatment sludge was alternately discharged into the two lagoons. In the spring of 1980, Lagoon No.3 was constructed in a clay soil environment and was immediately utilized. During mid-summer of 1979 and 1980, Two (2) to four (4) drums of TCE were applied around the lagoons as a measurement of weed control.

During 1979- 1980, An Illinois Pollution Control Board case (PCB 78-226) resulted from the discharge of effluents containing several heavy metals to the Pecatonica River. A settlement was reached with MPC. They were fined $125,000. In 1980, faced with the need for a significant addition to the waste treatment plant in order to meet NPDES limits, MPC obtained permission from the Freeport Water and Sewer Commission (FWSC) and the Illinois EPA (January 1982) to connect to the FWSC plant. The discharge line from the MPC wastewater treatment plant to the Pecatonica River was sealed. As one condition, MPC agreed to install (by June 1, 1983), solids dewatering equipment and to cease, at that point, discharge into the lagoons. The sludge discharge line to Lagoon No. 3 was therefore sealed. This action was completed on May 27, 1983. After one overlooked discharge pipe to lagoons was sealed in March 1986, all discharge routes to the lagoons have been sealed.

On April 11, 2000, a RCRA permit was issued to MPC to construct, operate, and provide post-closure care for the Corrective Action Management Unit (CAMU). This plan for the CAMU was initiated by the required RCRA Closure of the flowing eight units:

- Pre-RCRA Waste Management Units: Lagoon 0, Lagoon 1A, Cyanide Treatment Vault, and the Wetland Area.

- RCRA Hazardous Waste Management Units Subject to Closure: Lagoon 1, Lagoon 2, Lagoon 3 and Shawnee Building Area.

In order to close the eight units identified above and for the purpose of implementing hazardous waste cleanup under 35 IAC 724.201, the Illinois EPA allowed for designation of a new unit at the Modern Plating facility as a permanent Corrective Action Management Unit (CAMU), as defined in 35 IAC 720.110. 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 approximately 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 Modern Plating facility. The permitted volume of the landfill was 17,610 cy (cubic yards) with a maximum volume of approximately 22,800 cy. The total in-place volume of sludge and soil in the CAMU is approximately 14,500 cy. Only the following types of remediation wastes: Electroplating Sludge (F006) and soils contaminated with cadmium, chromium, cyanide, and trichloroethylene (F002) are allowed to place in the CAMU. This also 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 total volume of wastes disposed in CAMU is estimated to be 21,197 cubic yards. It was reported that all known contaminated areas at the facility were remediated in 2000/2001. Remediation activities at the site are documented in the reports titled Modern Plating Corporation CAMU Landfill Construction Documentation (FVD,2001) and Closure Documentation Report (FVD,2001).

Notes: HWMU/SWMU Waste placed in CAMU from Table F-2

Cynide Vault	200 yd^3
Shawnee Building	30 yd^3
Outfall Pipeline	67 yd^3
Wetland 1	1050 yd^3
Wetland 1A	95 yd^3
Wetland 2	625 yd^3
Wetland 3	1080 yd^3
Lagoon 0	2880 yd^3
Lagoon 1	3760 yd^3
Lagoon 1A	1910 yd^3
Lagoon 2	4750 yd^3
Lagoon 3	4750 yd^3
total (yd^3)	21,197 yd^3

2.2 Significant Dates

- **December 31, 1987:** USEPA issued a consent order to clean up the MPC site.
- **April 11, 2000:** Illinois EPA issued a RCRA post-closure permit (B-167) to MPC for the construction and operation of the CAMU.
- **August 6, 2001:** The CAMU was certified closed. This is the date the post-closure care period began for the CAMU at MPC.
- **May 7, 2009**: Illinois EPA issued a revised RCRA post-closure permit to MPC that incorporated modification requests M-1 through M-8.
- **June 9, 2011:** Illinois EPA issued a renewed RCRA post-closure permit (B-167R) (effective date on July 7, 2021).
- **September 12, 2019:** B-167-M-12, most current permit modification to B-167R was issued.

- **January 8, 2021:** A second renewal permit application was received.
- **March 5, 2021:** Notice of Incompleteness (NOI) was issued by Illinois EPA.
- **May 11, 2021:** Response to NOI was revived.

3. Specific Information Regarding CAMU

3.1 Design of CAMU

The liner system on the bottom and sides of the CAMU was constructed of the following layers, described from the top to bottom:

(a) Geocomposite drainage material (high density polyethylene (HDPE) drainage net sandwiched between two layers of geotextile material) with a minimum transmissivity of 3 x 10-5 m2/sec

(b) 60 mil HDPE geomembrane (textured on both sides)

(c) HDPE drainage net (geocomposite on the side slopes) with a minimum transmissivity of 3 x 10-5 m2/sec

(d) 60 mil HDPE geomembrane (textured on both sides)

(e) Geosynthetic clay liner (GCL)

The cover system on the top of the CAMU was constructed of the following layers, described from the top to bottom:

(a) 6 inches of topsoil (vegetative layer)

(b) 18 inches of cover soil (rooting layer)

(c) Geocomposite drainage material (HDPE drainage net sandwiched between two layers of geotextile material)

(d) 40 mil HDPE geomembrane (textured on both sides)

(e) Geosynthetic clay liner (GCL)

(f) 6 inches of grading/venting layer

The leachate collection and removal system were designed and operated to ensure that the depth of leachate over the liner does not exceed more than 1 foot (30 cm). Groundwater monitoring for the CAMU was provided in accordance with Section III of current permit B-167R.

3.2 CAMU Closure

The CAMU was closed in accordance with the approved permit application (Log No. B-167) and the conditions in the permit in 2001. The closure of the CAMU was documented in the Closure Documentation Report dated August 3, 2001 and received August 6, 2001 (Log No. B-167-M-3). The approval of permit modification B-167-M-3 constitutes approval of the certification of closure for the CAMU. A survey plat (PIN 18-14-32-402-019) was certified by a professional land surveyor in 2001. 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:

- The waste material in the CAMU is considered a RCRA hazardous waste;
- Use of the area is restricted; and
- 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.

Review Note: *A closure documentation report in a CD was included as Appendix R. (For the final File record, this information will be printed); however, for the purpose of public participation/comment period, this information on a CD is acceptable in a depository copy as it is identical to the original copy of the application.*

3.3 Post-Closure Care of CAMU

According to 35 IAC 724 Subpart G (Closure and Post-Closure), a hazardous waste management unit where waste is left in place must receive post-closure care in accordance with the approved permit application and the conditions of the permit for at least 30 years after the unit is closed. Activities required during post-closure care include, but are not limited to: (1) maintenance of final cover, (2) leachate and landfill gas management; (3) monitoring of the groundwater, and (4) providing financial assurance for post-closure activities pursuant to 35 IAC Part 724, Subpart H.

The post-closure care period began on **August 6, 2001**, the date the permittee submitted the certification of closure to the Illinois EPA and continue for thirty (30) years after that date; the initial milestone of the 30-year post-closure will be reached on **August 6, 2031**.

The Illinois EPA must require to include restrictions upon the future use of the site if necessary to protect public health and the environment. Specific post-closure care requirements under the existing were identified in Section II of the last approved permit (Log No. B167R-M-12).

3.4 Corrective Action History

3.4.1 RCRA Remediation of Hazardous Waste and Contaminated Soils

Plating operations have been conducted at the facility from 1963 to the present. As a result of its waste management practices, soils and groundwater at the site were contaminated with hazardous wastes associated with plating operations.

Wastes generated during the early years of MPC's operation included wastewater heavy metal electroplating sludge, spent cyanide plating bath solution, plating bath residues, spent stripping and cleaning bath solutions, corrosive waste, and heavy metal waste and chlorinated solvents. On-site lagoons were used to manage much of these wastes. The hazardous constituents in these wastes include. But not limited to, cadmium, chromium, cyanide, and chlorinated solvents. The following units and areas were created or used for the treatment, storage, and disposal of hazardous wastes at the site:

HWMUs	**SWMUs (Pre-RCRA Units)**
(S04) Lagoon 1	Cyanide Treatment Vault
(S04) Lagoon 2	Lagoon 0
(S04) Lagoon 3	Lagoon 1A
(S01) Shawnee Bldg	Wetland Soils Areas

Note: The last operational lagoon (Lagoon 3) was taken out of service in 1985.

MPC initially carried out RCRA closure/corrective action for the above units under USEPA's and Illinois EPA's oversight in accordance with an Illinois EPA RCRA interim status closure plan. Illinois EPA placed MPC on the Site Remedial Activities Priorities List on July 24, 1985 and then issued a 4 (q) Notice on June 20, 1986. On December 31, 1987, the USEPA issued a Administrative Order of Consent (AOC) which superseded the interim status closure plan. The AOC required MPC to perform a RCRA Facility Investigation (RFI) and Corrective Measure Study (CMS) for all the solid and hazardous waste management units at the facility and to implement corrective action.

In addition to above HWMUs and SWMUs, during the RCRA closure process, the following two Areas of Concern (AOCs) were identified:

Areas of Concern (AOCs)

Outfall Pipe
Wastewater Release

RFI Activities

In the Shawnee Building soil investigations were performed concurrently with the RFI/CMS at MPC. A RCRA closure plan for the hazardous waste storage areas (Area A, Area B and Area C) in the Shawnee Building was approved by the Illinois EPA in 1989. In 1993, soil cleanup objectives were established (compounds of concern include cadmium, cyanide, and trichloroethylene) and groundwater monitoring wells were installed. The extent of soil contamination has been defined and soil remediation has been incorporated into RCRA corrective action activities.

During RFI soil investigation soil borings BA-1A through B-6A were taken in order to verify the boundaries of the two buried lagoons, Lagoons 0 and Lagoon 1A. These results were mapped by an electromagnetic soil survey. Two (2) soil borings were completed in all five lagoons (LG-1-

LG-10) to sample the depth of waste sludge. Twenty-three (23) soil samples were collected from the wetland area adjacent to the lagoons. Four (4) surface samples were taken at four of these locations to assess human exposure to soil. Soil data coupled with groundwater monitoring data described below indicated that the lagoons were the principle source of contamination.

Sediment samples taken from the Pecatonica River during the RFI indicated no measurable impact on sediment quality at the sampling stations. Surface water samples found elevated cadmium, chromium, and nickel concentrations relative to background in the meander lake. However, the RFI environmental risk assessment performed in 1990 indicated that the potential exposure posed by the concentrations in the meander lake presented no health risk.

During the RFI, 13 additional monitoring wells were installed, 9A, 10A and well nests 17, 18 and 19 were installed. Well nests 17, 18, and 19 were installed to determine: (1) the extent of contamination in the unconsolidated and upper dolomite aquifers north of the lagoon area; and (2) the effect of the river on groundwater elevation in the aquifers near the river. Wells 9A and 10A were installed to determine: (1) groundwater contamination in the upper unconsolidated aquifer down-gradient of Lagoons 0 and Lagoon 1A; and (2) whether or not the water table was in contact with the bottoms of the lagoons.

The focus of investigation efforts from 1991 and 1993 was development of an acceptable corrective action measures study. During this time it was determined that additional soil samples and monitoring wells were necessary in order to: (1) determine if a release of hazardous waste or hazardous constituents into the soils, sediments, and/or groundwater had occurred during the operation of the underground cyanide treatment vault; and (2) to characterize the nature and extent of groundwater and soil contamination east and northeast of Lagoon 3. These investigative activities were completed in 1994.

Additional work on a corrective measures study for the facility was completed in 1995 and 1996. On December 24, 1996, USEPA informed MPC in a letter stating that the AOC was terminated and the selection and implementation of a corrective action measure would be deferred to the Illinois EPA through the RCRA interim status closure plans already in place for the facility.

Illinois EPA addressed proposed remedial activities in letters to MPC dated May 23, 1997 (comments on a proposed outline for a closure plan modification request); September 15, 1997 (approval of a revised groundwater monitoring program); November 21, 1997 (comments on a proposed outline for a RCRA permit application); March 2, 1998 (comments on a proposed RCRA closure plan modification request); June 1, 1998 (comments on a RCRA permit application); and November 18, 1998 (comments on the Revision 1 of the proposed RCRA closure plan).

A final RCRA closure plan for MPC was approved on December 2, 1999. The closure plan describes the procedures to be used to remediate waste and contaminated soil at the eight units identified above. A groundwater management zone was also established in the approved closure plan for this facility. Post-closure care of these units, including groundwater monitoring, were to be established in accordance with the closure plan.

The initial RCRA post-closure permit (B-167) authorized the construction, operation, and closure of a CAMU, and reiterated the closure/corrective actions required by the closure plan for the RCRA hazardous waste management units (HWMUs) and solid waste management units

(SWMUs) at the MPC site. Remediation waste generated from the closure and corrective action activities were placed in the CAMU. The CAMU is located where Lagoons 2 and 3 used to be located.

On May 7, 2009 Illinois EPA approved a Closure Documentation Report that addressed closure of the following hazardous waste management units (HWMUs): (1) the CAMU; (2) Lagoons 1, 2, 3 and: (3) the Shawnee Building. The approved closure documentation report also addressed completion of corrective action at the following solid waste management units (SWMUs) and/or areas of concern (AOCs): (1) Lagoons 0 and 1A; (2) Cyanide Treatment Vault; (3) the Wetlands; (4) Outfall Pipe; and (5) Wastewater Release Area. Attachment IV-1 Location of SWMUs and AOC, shows the location of these units within the facility. Groundwater at the facility is being addressed under the requirements of Groundwater Corrective Action section of the permit. A CAMU was established at the former location of Lagoons 2 and 3 for the placement of contaminated soil generated by remediation activities MPC in accordance with this permit. Remediation efforts were performed as described in the July 2001 CAMU Landfill Construction Documentation Report and the final August 2001 Closure Documentation Report.

Completed Remedial Activities for Each HWMU/SWMU under Permit B-167

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.

- 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 IV-I and as described in the summary table provided in Attachment IV-II. 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 3. 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 the permit.

Review Notes: According to the Closure Documentation report Appendix I (Page 2 of Appendix I), Cadmium RO was set at 200 ppm. This is Tier 1 RO for pH of above 7.74 for Class I and 7.24 for Class II GW in TACO.

- 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 these areas.

- 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 were removed from approximately 17' by 17' area (*Reviewer's Note: Appendix I of Closure Documentation Report*) 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.

- 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 Attachment IV-1 *(i.e. Drawing No 2 in the subject application under B-167R2*) and described in Attachment IV-II (*i.e. Table F-2 of the subject application under B-167R2)* of the RCRA Permit (B-167). The remedial action achieved the remedial objectives and met the requirements of 35 IAC724.201. The wetland areas were returned to their previous grade by backfilling. No further action is necessary in the Wetland Area.

- 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.

- Wastewater Release
  During construction of the CAMU, a pipeline that transfers wastewater from the manufacturing plant to the WWTP ruptured (IEMA 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.

- Environmental Land Use Control (ELUC)
  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 recorded with the Stephenson County Clerk/Recorder on June 1, 2010 as Document Number 201000111587. A drawing showing the boundary of the ELUC is provided in Attachment IV-III. 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 Ill. Adm. Code 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.

  The recorded ELUC placed the following restrictions on the subject facility:

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

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

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

  d. 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;

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

3.4.2 Summary of Groundwater Related Corrective Action Related Letters Issued to Date

Log #	Description	Received Date	Date of action
B-167R-CA-1	the Groundwater Management zone (GMZ) Re-evaluation	June 6, 2019 and September 17, 2019	January 30, 2020
B-167R-CA-2	Extension request regarding to B-167R-CA-1	April 9, 2020	May 05, 2020
B-167R-CA-3	The Revised Groundwater Management Zone (GMZ) Revaluation.	June 25, 2020 and September 3, 2020	October 16, 2020
B-167R-CA-4	Corrective action modification request to redevelop the monitoring wells and continue evaluation of low-flow groundwater sampling at all groundwater monitoring wells.	January 13, 2022, May 12, 2022 and August 1, 2022	August 30, 2022

B-167R-CA-1

The Groundwater Management zone (GMZ) Re-evaluation was not approved by the Illinois EPA. The following are conditions the facility must address in accordance with the letter issued by the Illinois EPA dated January 30, 2020.

(1) The current GMZ, a three-dimensional region containing groundwater being managed. to mitigate impairment caused by the release of contaminants from a site, is inadequate. The facility reported increasing trends in several groundwater monitoring wells including the GMZ boundary wells. the increasing trends are likely due to a • continuing source from the former waste lagoons or the regulated Corrective Action Management Unit (CAMU).

(2) Groundwater monitoring wells MW-23C, MW-20C, MW-17C, and MW-15C located. at or near the property boundary were reported exceeding the applicable 35 IAC 620, Groundwater Quality Standards.

(3) It appears the current selected corrective action the CAMU, is not effective in remediating the groundwater contamination and as a result several wells indicate increasing trends and several monitoring wells at the property boundary are above the approved 35 IAC 620. Groundwater Quality Standards, indicating off-site contamination or the potential for off-site contamination.

(4) An investigation must be conducted to determine the source or sources of contamination at the facility. This investigation must also determine the vertical and horizontal extent of groundwater contamination, including any off-site groundwater contamination.

(5) The facility must revise the "Re-evaluation of the Groundwater Management Zones at RCRA Facilities" submittal and include a proposal for an effective corrective action plan capable of addressing and mitigating the groundwater contamination at the MPC facility and submit to the Illinois EPA for review and approval.

(6) The revised GMZ Re-Evaluation must include all the components recommended in the attached guidance document as well as: (1) an explanation of the presented groundwater monitoring results; (2) the proposed corrective action; and (3) the revised GMZ boundary which includes a three-dimensional region containing groundwater being managed to mitigate impairment cause by the release of contaminants from the site. The proposed GMZ must include within the three- dimensional region, all groundwater monitoring wells proposed to be managed to mitigate impairment caused by the release of contaminants from the MPC site.

(7) Any off-site property owner must concur in writing to the establishment of the GMZ on their property. This concurrence, if necessary, must be provided to the Illinois EPA for review and approval.

B-167R-CA-3

The Illinois EPA hereby approves the-Revised GMZ Re-evaluation at this time subject to the following conditions and modifications:

(1) Low flow sampling techniques shall be implemented during the next semi-annual sampling event to determine the impact of turbidity oil sampling analysis. If it is determined that low-flow sampling will result in a less turbid sample the Illinois EPA recommends that low-flow sampling techniques continue to be used during the semi- annual sampling events. Results of the use of the low-flow sampling techniques must be provided to the Illinois EPA in a report which must include the facility's conclusions and proposals.

(2) The GMZ must be revised to include monitored natural attenuation paramcters which include, ethene, ethane, methane paramcters as well as oxidation-reduction potential and dissolved oxygen. Monitoring and analysis of these parameters must be included in the semi-annual sampling event.

(3) If concentrations of contaminants of concern continue to exceed the 35 IAC 620 Groundwater Quality Standards in wells at or near the GMZ boundary, the facility must submit a proposal to address the contamination extending beyond the GMZ boundary.

(4) Within 90 days of obtaining laboratory data gathered from the use of low-flow sampling techniques and monitoring of natural attenuation parameters, submit to the Illinois EPA a report as a Corrective Action modification request. This report must include the following:

a. Analytical data from low-flow sampling techniques d natural attenation parameters;

b. Groundwater monitoring data for the last 8 sampling events;

c. Conclusions drawn from the data gathered; and

d. A proposal to continue use of low-flow sampling techniques, if applicable, continued monitoring of natural attenuation parameters, and corrective action to address contamination extending beyond the GMZ boundary, if applicable.

(5) Pursuant to 35 IAC 620.270(c), a groundwater management zone expires upon the Agency's receipt of appropriate documentation which confirms the completion of the action taken pursuant to subsection (a) and which confirms the attainment of applicable standards as set forth in Subpart D. In addition, this section requires, at a minimum of one every five years, re-evaluation of the on-going adequacy of controls and management provided by the GMZ.

Section II: Detailed Review of RCRA Renewal Application under Log No. B-167R2

1. Permit Forms and Section A

Original Application Received: January 8, 2021
Technical NOD Issued: March 5, 2021
Addendum Response to NOD Recived: 5/11/2021 (no completeness letter has been sent)
Addendum Recived: 6/5/2025

In accordance with 35 IAC 703.180, the application package must consist of the following:

- ✓ Information required by 35 IAC 702.123;
- ✓ Part A (Section 703.181);
- ✓ Part B, as follows:
  - General information (Section 703.183);
  - Facility location information (Section 703.184);
  - Groundwater protection information, if required (Section 703.185);
  - Specific information for each type of TSD unit, i.e. tanks, surface impoundments, landfills, etc. (Sections 703.200 et seq.);
  - Additional information to demonstrate compliance with 35 IAC 724 (Section 703.183(t));
  - Information for trial burn permits and land treatment demonstrations (Subpart E of this Part)

Part A Form

A.1 Part A Application:

This information is included in attachment 3 of the application.

Review Notes: *Part A Form (USEPA 8700 Form) is not complete. It is indicated that it does not need Part for RCRA Renewal. This is incorrect. The facility must submit an updated Part A form as Specified under Special Conditions (*Section V) of the Permit ()30-day from the effective date of the permit).*

1. Section A Evaluation

Review of Part A Form:

The following information must be provided, using the application form provided by the Agency in accordance with 35 IAC 702.123:

(a) The activities conducted by the applicant that require it to obtain a permit under RCRA

Review Notes: *The hazardous waste permit part A form indicates Modern Plating Corp. is a large job-shop plating business with capabilities to plate a variety of metals. The main business is electroplating and finishing of metals. The hazardous wastes are Wastewater treatment sludges from electroplating operations. This part meets the requirement.*

(b) The name, mailing address, and location of the facility for which the application is submitted

Review Notes: *This information was provided in RCRA Permit Application Form (LPC-PA23).*

(c) Up to four SIC codes that best reflect the principal products or services provided by the facility

Review Notes: *NAICS CODE provided as 332813 They listed the EPA Hazardous Waste they generated and described the nature of business.*

(d) The operator's name, address, telephone number, ownership status, and status as Federal, State, private, public, or other entity.

Review Notes: *This information was provided in the application.*

(e) This subsection (e) corresponds with 40 CFR 144.31(e)(5) and 270.13(f), relating to facilities on Indian lands. The Board has replaced the corresponding federal text with this statement to maintain structural parity with the corresponding federal rules.

Comments: The facility did not provide information about whether the facility is located on Indian lands. However, it is marked as 'private land. This should not be an issue.

(f) A listing of all permits or construction approvals received or applied
Review Notes: *The information in Section A indicates the facility owns two other permits. One is FR050196 which is wastewater discharge of treated wastes to the city of Freeport and the other is 177020AALK4711, which associates with air emissions.*

(g) A topographic map extending 1609 meters (one mile) beyond the property boundaries of the source, depicting the facility and each of its intake and discharge structures; each of its hazardous waste treatment, storage, or disposal facilities; each well where fluids from the facility are injected underground; and those wells, springs, other surface water bodies, and drinking water wells listed in public records or which are

otherwise known to the applicant within 402 meters (one-quarter mile) of the facility property boundary

Review Notes: *Figure A-1a and Figure A-1B provided the required information.*

(h) A brief description of the nature of the business.

Review Notes: *MPC is a large job-shop plating business to plate a variety of metals. The main business is electroplating and finishing of metals.*

In accordance with 35 IAC 703.181, the following information must be included in Section A of the RCRA application:

✓ The latitude and longitude of the facility;

Review Notes: *The latitude and longitude were included in Figure A-1B.*

✓ The name, address, and telephone number of the owner of the facility;

Review Notes: *The information was included in Hazardous Waste Permit Part A Form.*

✓ An indication of whether the facility is new or existing and whether it is a first or revised application;

Review Notes: *It is an existing one.*

✓ For existing facilities, a scale drawing of the facility showing the location of all past, present, and future treatment, storage, and disposal areas;

Review Notes: *This information is incomplete. The facility did not show the location of present and future treatment, storage and disposal areas for sludges F006 and halogenated solvents F002.The facility must provide all hazardous waste management units and their locations at the facility, even if they are not subject to RCRA permit.* ***(To be included as Compliance Schedule)***

✓ For existing facilities, photographs of the facility clearly delineating all existing structures; existing treatment, storage, and disposal areas; and sites of future treatment, storage, and disposal areas;

Review Notes: *The facility submitted Photos of the following existing structures taken on 04/21/21*

Structures	*Photo taken directions/Comments*
Water Treatment Plant outside	*South, West and North*
Water Treatment Plant inside	*East and West*

CAMU D80	*North, East, Northwest*
Liquid Caustic storage room	*Front door*
Liquid Caustic storage tank	
Water Treatment Plant Sulfuric storage tank	
Water Treatment Plant air compressor	
Chemical storage area	
Modern Plating office	*West*
Central site building	*West*
Loading dock on S Hancock Ave	*East*
Building on S Hancock Ave	*East*
Former Shawnee Building, non-hazardous storage	*East, South, West*
SE corner of site	*East*
Storage tanks outside eastern site building	*South*
Eastern site building	*South*

✓ A description of the processes to be used for treating, storing, and disposing of hazardous waste, and the design capacity of these items;

Review Notes: *The CAMU was closed in 2001 and is under post closure care. The designed capacity of CAMU is 17610 Y.*

✓ A specification of the hazardous wastes listed or designated under 35 IAC 721 to be treated, stored, or disposed of at the facility, an estimate of the quantity of such wastes to be treated, stored, or disposed of annually, and a general description of the processes to be used for such wastes.

Review Notes: *The hazardous wastes are wastewater treatment sludges from electroplating operations. EPA Hazardous Waste No. is F006. The hazardous wastes come from three lines. The annual disposal quantities of the three lines are 4489, 4489 and 3553 T. The other kind of hazardous wastes are spent halogenated solvents and the EPA Hazardous Waste No. is F002. Hazardous constituents are Tetrachloroethylene, methylene chloride, trichloroethylene, 1,1,1-trichloroethane, 1,1,2-trichlorethane, chlorobenzene, 1,1, trichloro-1,2,2-trifluoroethane, ortho-dichlorobenzene, trichlorofluoromethane. The estimated annual quantity is 47 T. : The process Codes of the hazardous waste is D80, meaning all the hazardous waste was disposed into a designated landfill.*

Review Comment: as commented earlier, they facility must provide a complete list of all hazardous waste management units, regardless of non-RCRA permit required status.

✓ For hazardous debris, a description of the debris categories and containment categories to be treated, stored, or disposed of at the facility

Review Note*: Part A only lists that waste disposed at CAMU (D080). A current Part A Form must also reflect on all hazardous waste generated and accumulated at the*

facility. Part A must be submitted within 30-day of the effective date of the renewed permit.

A.2.1. Facility Certification:, , 702.126

Review Notes: *A revised LPC-PA23 Form was submitted and recived by Illinois EPA on June 5, 2025. This form is acceptable.*

A.2.2. Technical Information Certification: 703.182, Illinois Professional Engineering Act

Review Notes: *A revised LPC-PA23 Form was submitted and recived by Illinois EPA on June 5, 2025. It is signed by Brian D. Symons, P.E. This form is acceptable.*

A.2.3. 39i Certification: Section 39 (i) of Environmental Protection Act

Review Notes: *39 (i) Certification was submitted in Appendix K. The certification indicates no prior conduct and pending proceedings and was signed by the president.*

A.3 Public Disclosure Exemption Claims and Trade Secret Claims

Review Notes: *The application indicates no public disclosure exemption.*

A.4 Public Participation: Facility Mailing List& Information Repositories

Review Notes: *The application and related documentation were available for public review at a community repository, Freeport Public Library from January 2021 to November 20, 2021, and the facility mailing list is included in Appendix A. The Public Notice of the repository availability was sent out by using the mailing list.*

Mailing list will be updated by the Illinois EPA Community Relations at the time of public notice for a draft decision.

2. Section B Evaluation

B.1 General Description: 702.123, 703.183

B.1.1 Operation of Facility

(1) Identify the owner and operator of the facility as well as the address and size of the facility

Comments: The owner and operator of the facility as well as the address and the size of the facility was identified in the application package.

(2) Describe the facility in general, its operations, and the specific activities conducted by the applicant require a permit under RCRA, including the name of the business.

- Commercial facilities should identify the types of industry served;

- On-site facilities should briefly describe the process(es) involved in the generation of hazardous waste.

Review Notes: *The facility described its types of industry as a metal plating business and the process involved in the generation of hazardous waste was described as below. Large quantities of wastewater are generated by the facility as part of their normal plating operations. The wastewater is pretreated on site and then discharged into Freeport Water and Sewer Commission plant. During the pretreatment process, the generated wastewater sludges are hazardous waste with EPA Hazardous Waste No. F006. Before 1986, the sludges were piped into four lagoons and causing site contaminations. In order to remediate contaminated areas, CAMU was designed and constructed in 1999. All the contaminated soils and sludges were put in CAMU. In 2001, CAMU was closed with hazardous waste left on site and is now under post closure care.*

Review Notes: *The application does not indicate how the current generated sludge is stored in less than 90 days units or disposed; the facility must need a permit. This application only deals with the hazardous waste placed in CAMU Landfill at the MPC facility.* ***(Compliance Schedule)***

(3) A legal description of the facility developed and certified by a professional land surveyor licensed to practice in Illinois

Review Notes: *CAMU legal description and survey map of Modern Plating property was certified by James D. Prehn, registered Illinois land surveyor and was submitted in appendix J. The map of extent of areas remediated submitted in appendix J indicates the area remediated and the area of closed CAMU landfill.*

Review Notes: *There is legend of approximate boundary of existing sludge storage area, but the area cannot be found in the map. The facility must provide an updated map with the list of HWMUs where all generated wastes at the facility is stored or accumulated.* ***(Compliance Schedule)***

(4) The Tax Property Identification Number(s) of the land which comprises the facility. If more than one Property Identification Numbers (PIN) are associated with the facility, a scaled drawing showing the boundaries of each parcel within the facility must be provided.

Review Notes: *The application claimed PIN is included in Appendix J.*

B.1.2&3 Hazardous Waste Management Units at the Facility; Solid Waste Management Units at the Facility

Identify and brief describe the hazardous waste management units at the facility. Identify and briefly described the solid waste management units and the facility which are the focus of the RCRA corrective action program at the facility.

Review Notes: *The RCRA- regulated CAMU was identified as current hazardous waste management unit. The facility listed the following areas and structures remediated in the corrective action by excavating the contaminated soils and depositing into the CAMU.*

- *Four (4) hazardous waste management units (HWMUs): Lagoons 1, 2, 3, and Shawnee Building;*
- *Four (4) solid waste management units (SWMUs): Lagoons 0, 1A, Cyanide treatment Vault, Wetland Areas (1, 1A, II, and III);*
- *Two Area of Concern: Outfall Pipe and wastewater release area.*

The facility stated no active hazardous and solid waste management units currently at the MPC facility. The facility is still active in operating. Wastewater treatment sludges from electroplating operations. EPA Hazardous Waste No. F006, are still generated. In accordance with Part A form, the annual disposal quantities of the three lines are 4489, 4489 and 3553 T.

In accordance with 35 IAC 722.117.c), an LQG also generating wastewater treatment sludges from electroplating operations that meet the listing description for USEPA hazardous waste number F006 may accumulate F006 waste on site for more than 90 days but not more than 180 days without being subject to 35 IAC 702, 703, and 724 through 727 and the notification requirements of section 3010 of RCRA (42 USC 6930), provided that the LQG complies with additional conditions for exemption.

Additional requirement for the facility to submit the list of waste management areas and historical information of any releases occurred and action taken for the releases must be submitted for further evaluation of corrective action at the facility. ***(Compliance Schedule)***

B.2 Topographic Map: 702.123(g), 703.183(s), 703.184, 703.185(c), 703.185(d), 724.197

B.2.1 Facility + 1 mile:

Provide a topographic map that extends at least 1 mile beyond the property boundaries. This map must depict the legal boundaries of the facility and surrounding land use.

Review Notes: *Figure B-1 is the required topographic map depicting surrounding land use and the site location. The legal boundaries of the facility are depicted on Drawing 2R.*

B.2.2 Facility + 1000 feet:

Provide a topographic map that shows the facility and a distance of 1,000-feet outside the facility's property line, at a scale of 1-inch equal to not more than 200-feet. The map(s) must contain/identify the following (If an item does not pertain to the facility, the narrative should indicate why it is not pertinent):

***Review Notes**: This is acceptable. Maps and Drawing provided in the application are summarized below:*

Required contains	**Review notes**
Map Orientation	*Drawing 2R*
Map Date	*May ,2021*
Scale	*1-inch: 200 feet*
Legal Boundaries	*Drawing 2R*
Surrounding land uses	*Figure B-1*
Access controls	*The location of a fence that surrounds the CAMU is shown on Drawing 7A in Appendix C*
Buildings and Structures	*Drawing 2R*
Storm drains	*Drawing 2R*
Sewers: storm, sanitary and process	*Drawing 2R*
Surface waters including intermittent streams	*Drawing 2R*
Any waste injection or groundwater withdrawal wells (both on-site and off-site)	*There are no waste injection wells*
Areas in the 100 year flood plain	*Drawing 2R*
Flood control or drainage barriers	*No. CAMU is located outside of the flood zone.*
Run-off control systems	*Drawing 7A in Appendix C*
Fire control facilities	*None for CAMU*
A wind rose	*Figure WR*
Existing hazardous waste units	*Drawing 2R*
Solid waste management units	*Drawing 2R*

B.3 Location Standards: 703.184, 724.118

B.3.1 Seismic Standard:

Identify any hazardous waste management units within 200-feet (61 meters) of a fault which has had displacement during Holocene time.

***Review Notes:** Appendix D shows no faults active during the Holocene period exist within 2 miles of the MPC facility.*

B.3.2 Floodplain Standard:

Document whether or not the facility is located within a 100-year floodplain. The source of data used for this determination must be provided as well as a copy of the relevant flood map produced by the National Flood Insurance Program (NFIP). Appropriate calculations and flood plain maps must be provided when NFIP amps are not available.

Review Notes: *Drawing 2R shows the 500-year floodplain. The location of this floodplain is defined on NFIP map in Appendix D.*

B.3.3 Facilities in the 100-year Floodplain:

Facilities located within the 100-year floodplain must provide the following information regarding procedures in place to prevent flooding of the facility:

Review Notes: *The facility responded that the closed CAMU was located outside 500-year floodplain. Therefore, the facility did not provide the information list in section B.3.3. But in accordance with the Drawing 2R, the boundary of 500-year flood is near by the lagoon 1 and 2. In page 6, section B.1.1 it is mentioned that Spring floods of 1973 caused erosion to the back berms of lagoon 1 and 2. The flood plain of Freeport, Ill. in subject submittal is effective on May 16, 1977. The facility is required to update the flood plain if it is available.*

Permit Condition for the facility to review and update the flood-area within 5-years of the effective date of the permit, as necessary, and identify any proactive/ preventive measures necessary to maintain the integrity of the CAMU.

B.3.4 Existing facilities not in compliance with 724.118(b):

Review Notes: *In accordance with 724.118(b), A facility located in a 100-year floodplain must be designed, constructed, operated and maintained to prevent washout of any hazardous waste by a 100-year flood unless the owner or operator can demonstrate the waste can be removed safely before flood water reach the facility or no adverse effect on human health and the environment will result if washout occurs. As shown on Drawing2R, the CAMU is not located in the 100-year flood plain. Therefore, this section is not currently applicable.*

B.4 Operating Record: 724.173

The permittee must keep and maintain a written operating record that includes all the records, reports, notifications, and data required by 35 IAC 724.173 and the conditions in this permit for the entirety of the post-closure care period. Identify the location where the Operating Record is maintained at the facility. Describe the procedures used to record the following information described in 724.173 in the facility's operating record during the post-closure period:

- Records of inspections and repairs,
- Monitoring, testing, or analytical data and corrective action data where required,

- All closure and post-closure cost estimates,

- Annual certification, that a program in place to reduce the volume/toxicity of hazardous waste generated at the facility.

Review Notes: *The facility provided Post-Closure Inspection Schedule and Log for CAMU Landfill in Table B-1 and Post-Closure Maintenance Plan for CAMU Landfill (Table B-2). Maintenance, inspection, and repair report should be submitted each year. This requirement will be updated as conditions in coming permit.*

3. Section C Evaluation: GROUNDWATER MONITORING

Review Note:
This Section associated with Groundwater is reviewed by Groundwater Unit geologist. Please Refer to Aidan Fullriede's memo.

4. Section D Evolution: PROCEDURES TO PREVENT HAZARDS

D.1 Security: 703.183(d), 724.114

The owner or operator must prevent the unknowing entry and minimize the possibility for the unauthorized entry. Unless a waiver is granted, the facility must have either 24-hour surveillance systems, or a barrier and a means to control entry as set forth in Item D.1.2 below.

D.1.1 Waiver from the Security Requirements

Review Notes: *The facility is not seeking a waiver.*

D.1.2 Restricting Entry to the Facility

1. 24-Hour Surveillance System

Review Notes: *It is not employed at the MPC facility.*

2 Barrier and Controlled Entry

Review Notes: *A 6-foot-high chain-link fence has been constructed around the CAMU to limit human and animal access to the CAMU. The location of the security fence is shown on Drawing 2R and Drawing 7A located in Appendix C. The fence material and construction are included in Appendix C on Drawing 7B.*

D.1.3 Warning Sign

Identify the locations of all warning signs on a scale drawing of the facility. A sign with the legend, "Danger X- Unauthorized Personnel Keep Out" must be posted at each entrance to the active portion of a facility, and at other locations, in sufficient numbers to

be seen from any approach to this active portion. The sign must be legible from a distance of at least 25 feet.

Review Notes: *In accordance with the statement in the application, warning signs with the legend," Danger Hazardous Waste-Unauthorized Personnel Keep Out" are posted at the access control gate and along each of the other 3 sides of the fence and the signs are large enough to be legible from a distance of at least 25 feet. No scale drawing including the locations of all warning signs was submitted in the application. According to the requirement, the facility need to identify the locations of all warning signs on a scale drawing of the facility.*

D.2 Equipment Requirements: 703.183, 724.132, 724.133, 724.134,724.135

All facilities must have the equipment and procedures listed in D.2.2 thru D.2.8 below in place unless the applicant submits a waiver request as identified in D.2.1 below. The location within the facility of the equipment described in this section must be shown on the drawings required in Section B.2.2 above.

D.2.1. Waiver

Facilities may seek a waiver from any or all of the equipment/procedure requirements below. To obtain a waiver, the applicant must demonstrate that none of the hazards posed at the facility would require the particular type of equipment/procedure at issue.

Review Notes: *MPC is not requesting a waiver from the equipment requirement.*

D.2.2. Internal Communications

Describe the internal communications or alarm system for providing immediate emergency instruction (voice or signal) to facility personnel.

MPC maintains an updated version of Hazardous Waste Contingency Plan (FVD, 1999c, update 2017) addressing internal communications in the event of certain emergency conditions. First, second, and third shift emergency coordinators and their alternates are listed in FVD (1999c) with both office, home, and cell phone numbers. In the event of a power failure, an emergency generator provides power to operate the telephone system.

Alarm systems are provided for the CAMU systems. The leachate Pump Building designed and constructed with explosion proof fixtures as appropriate. Leak detection, indicators, and a prominent alarm light are provided on the Building Control Panel. Drawing 12 in Appendix C shows details.

Review Notes: *Drawing 11R in Appendix C shows the details of the leachate pump building. Drawing 12 is not found in Appendix C (already checked three copies). In accordance with the requirement of Section B.2.2, equipment required by Item D.2 should be located in Drawing 2R, a topographic map. But the leachate Pump*

Building can not be found in Drawing 2R. Location of Pump House will be included in a revised site layout map. ***(Compliance Schedule)***

D.2.3. External Communications

Describe the device, such as a telephone (immediately available at the scene of operations) or a hand-held two-way radio, capable of summoning emergency assistance from local police departments, fire departments, state or local emergency response teams.

The Contingency plan has been provided to the local hospital, fire and police departments, and a local environmental clean up company. External communications are addressed in the plan. Emergency contact information for the U.S. Coast Guard, National Response Center, Illinois EPA 24-Hour Hotline, Chemtrec, and PDC Response, Inc are included. A decision-making flow chart is included in the Plan.

Review Notes: *The facility is required to include updated version of Hazardous Waste Contingency Plan (FVD, 1999c, update 2017) referred above in subject application.* ***(Compliance Schedule)***

D.2.4. Emergency Response Equipment

Describe the following emergency response equipment present at the facility: portable fire extinguishers; fire control equipment, spill control equipment; and decontamination equipment.

Review Notes: *Appendix I has two figures from the Contingency Plan (FVD, 1999c updated in 2017). This Contingency Plan must be appended in this application. Multipurpose ABC fire extinguishers are located as shown on Figure G-1. Fire hydrants and spill equipment are marked on Exhibit 1.*

D.2.5. Water for Fire Control

Provide a statement signed by an independent fire control professional, or the responsible fire department, certifying that the facility has water at adequate volume and pressure to supply water hose streams, foam producing equipment, automatic sprinklers, or water spray systems. The document must include an original signature from the fire control professional or responsible fire department.

Review Notes: *The facility anticipates forwarding the statement to Illinois EPA by January 31, 2021 to fulfill this requirement. June 25, 2025 information included sufficient information to meet the condition.*

D.2.6. Personnel Protection Equipment

Describe the procedures, structures, and clothing equipment used to protect personnel from undue exposure to hazardous waste.

Review Notes: *Level D personal protection equipment is worn by personnel when sampling and servicing the CAMU and associated monitoring equipment. In addition, chemical resistant gloves and safety glasses are worn when monitoring groundwater or leachate. Hard hats are worn when an overhead hazard exists. A list of emergency equipment is included in Section G-5 of the Contingency Plan, Hazardous Waste Contingency Plan and Related Documents.*

D.2.7. Testing & Maintenance of Emergency Equipment. 35 IAC 724.133

Demonstrate that all facility communications or alarm systems, fire protection equipment, spill control equipment and decontamination equipment, where required, is tested, maintained, and calibrated, as necessary to assure its proper operation in time of emergency.

Review Notes: *The Contingency Plan (FVD, 1999c updated in 2017) describes testing and maintenance for the emergency equipment. The Contingency Plan must be included as an appendix in this application. Put this condition in coming permit: All the maintain and inspection record shall be kept on-site at the facility, or available electronically unless the documents require original signature, and available for the Illinois EPA's review.* ***(Compliance Schedule)***

D.2.7.1. Equipment Testing:

Identify all emergency equipment and describe how the equipment is tested, maintained, and calibrated.

Review Notes: *This application indicates the following emergency equipment and their maintain and test.*

- *The sprinkler signaling system is maintained by the company maintenance department and maintenance reports are filed with the company's insurance carrier. The system is tested monthly utilizing a flow test. Blowdowns on the sprinkler system are conducted annually.*
- *The fire extinguisher equipment is maintained by the safety committee and is reviewed by contract quarterly by Safety Services of Freeport.*
- *Inspection of emergency equipment is performed weekly and is recorded.*
- *Telephones are in daily use and the radio is checked when activities are performed in the waste storage building.*

D.2.7.2. Schedule

Provide a testing and maintenance/calibration schedule for all communications, monitoring, safety, spill control, decontamination, and emergency equipment.

Review Notes: *The application indicates that internal communication systems employed in the CAMU leachate detection and leachate collection system are inspected on a regular basis by trained MPC personnel and the leachate detection system alarms are inspected monthly, and the leachate collection system alarms are inspected every 15 days.*

D.2.8. Equipment and Power Failure

Describe the procedures, structures, and equipment used to mitigate the effects of equipment failure and power outage.

Review Notes: *If power outage occurs for more than 12 hours, an additional emergency generator can be rented from the agencies listed in G-4A of the Contingency Plan. This generator can be used to power the leachate collection system pumps. The Contingency Plan was referred several times in this application. The facility must include the Contingency Plan in this application. (Permit Condition)*

Furthermore, to address all inspection and maintenance plans, the facility must submit an annual summary of post-closure care activities conducted at the site. This must be submitted with the annual leachate sampling results by June 1 each year (Permit Condition undersection II

- *Documentation whenever maintenance to any component of the leachate detection and collection systems is performed. Include a description of procedures taken to maintain this equipment.*

- *Procedures, regarding safety precautions related to regular operation, maintenance, and calibration of the leachate collection and detection system.*

- *Safety precautions 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*

- *The procedures for spill control and decontamination of the leachate collection and calibration system.*

D.3 Inspection Requirements: 703.183(e), 724.115

Describe the procedures followed to inspect/ensure the functionality of everything needed to provide adequate post-closure care of the unit closed as a landfill at the facility in accordance with the RCRA requirements.

Copies of the inspection log and repair log that are used to document inspections and repairs at the facility in accordance with the RCRA requirements must be provided as part of the permit application.

Indicate that copies of the inspection log and repair log are maintained at the facility as part of the operating record.

Review Notes: *Post-closure inspections on the CAMU and associated systems are conducted at the facility on a regular basis. All inspection procedures are outlined in the post-Closure Inspection Schedule and Log contained in Table B-1.*

D.3.1 Inspection Log

An inspection log must be maintained which includes all the items list below. The log must also include the date and time of each inspection, the name of the inspector, notation of the observations made, and the date of any repairs or remedial actions.

D.3.1.1 Items Inspected: Identify each item the owner/operator will inspect at the facility in order to comply with the RCRA requirements.

D.3.1.2 Types of Problems: Identify the types of problems the inspector must look for during an inspection.

D. 3.1.3 Inspection Frequency: Identify the inspection frequency for each item in the log.

Review Notes: *Table B-1 provides the inspection schedule and log sample. The facility stated Visual inspection and appropriate checks were preformed regularly on the following items: the leachate Collection System, the Leak Detection System, the CAMU exterior, erosion control structures, sedimentation basins, CAMU cover system, security equipment, the gas venting system, the groundwater monitoring wells, and the horizontal and vertical benchmark. The log sample covers items inspected, type of problems for each item and inspection frequency.*

D.3.2 Repair Log

The repair log must be used to schedule and record repairs (deterioration, or malfunction of equipment or structures) revealed by an inspection of the items listed in the inspection log. The repair log must include the following items:

1. The item needing repair;
2. The problem identified during the inspection that needs repair;
3. The date the inspection took place;
4. The name of the person who conducted the inspection;
5. The name of the person who makes the corrected repair;
6. The date the repair was made;
7. The efforts carried out in making the repair;
8. Any other appropriate comments.

Most repairs should be made at the time it is determined to be necessary and all repairs should be made within 24 hours. The timeliness of the repair is dependent on the potential impact the problem needing repair may have on protecting human health, the environment, and the safe operation of the facility.

Review Notes: *Repair log template was provided in Table B-3 and the contents in the template meet the requirements of Illinois EPA.*

D.3.3 24 Hour reporting (702.152(f),703.245(b))

Describe the procedures to be followed if an inspection reveals any noncompliance with the permit which may endanger health or the environment: 1) report the required information about the incident orally within 24 hours from the time the Permittee becomes aware of the circumstances, and 2) provide a written description of the incident within 5 days of the time the Permittee becomes aware of the circumstances.

Review Notes: *In the application, the facility proposed the following procedures to be followed:*

The inspection and maintenance procedures are designed and implemented to prevent CAMU operability issues that might lead to permit noncompliance. Should an issue arise, MPC shall report to the Illinois EPA any noncompliance may endanger health or the environment. Any such information shall be reported orally within 24 hours from discovery. This report shall include the following:

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

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.

The description of the occurrence and its cause shall include:

Name, address and telephone number of the owner or operator;
Name, address and telephone number of the facility;
Date, time, and type of incident;
Name and quantity of material(s) involved;
The extent of injuries, if any;
An assessment of actual or potential hazards to the environment and human health outside the facility, where applicable; and
Estimated quantity and disposition of recovered material that resulted from the incident.

A written submission shall also be provided within 5 days of the discovery. The written submission shall contain a description of the noncompliance and its cause; the period of noncompliance including exact dates and times and if the noncompliance has not been corrected; the anticipated time it is expected to

continue; and steps taken or planned to reduce, eliminate, and prevent recurrence of the noncompliance. The Illinois EPA may waive the five-day written notice requirement I favor of a written report within 15 days. (35 IAC 702.152(1) and 703.245(b))

4. **Section E Evaluation: CLOSURE AND POST-CLOSURE REQUIREMENTS**
703.183(m), 703.203(f), 703.204(h), 703.207(e), 724.218, 724.297(b) and (c), 724.328(b), 724.328(c)(1)(B),724.380(c), 724.401(b)

E.1 Information Regarding the Unit(s) closed as a Landfill

The foundation for developing an appropriate post-closure care program for a unit closed as a landfill is a thorough understanding of the unit, focusing on its surroundings, construction, operation and closure.

E.1.1 General Information Regarding of the Unit to Receive Post-Closure Care

Identify the unit at the facility which were closed as landfills to which the post-closure requirements of 35 IAC Part 714, Subpart G apply. Among other things, provide:

- A scaled drawing showing the location and boundaries of the unit within the facility;
- A copy of Illinois EPA'S letter accepting certification of closure of the unit as a landfill;
- The date that the post-closure care period for the unit began; and
- A certified copy of the survey plat and post-closure notices filed in accordance with 35 IAC 724, Subpart G or 725, Subpart G with the county in which the facility is located.

Review Notes: *The location and the boundaries of the CAMU was shown in Drawing 2R. The closure plan was approved by Illinois EPA and the post-closure care period began April 11, 2000, and the document is included in Appendix L. A certified survey plat is included in Appendix J.*

E.1.2 Geology and Hydrogeology Around/Beneath the Unit

Provide a detailed description of the geology and hydrogeology around/beneath the unit. Of special concern is the presence of silt, and or other permeable zones around and beneath the unit which, if not properly addressed, could be a conduit for the migration of leachate or landfill gas away from the landfill. This description should be supplemented with boring logs, drawings and cross-sections.

Review Notes: *There are four strata at the site: organic clay, alluvial sand and gravel, lacustrine clay, and the dolomite bedrock. Two aquifers were identified including an upper aquifer consisting of permeable alluvial sand and gravel and a*

bedrock aquifer consisting of Ordovician age Galena and Platteville Group dolomite. The soil's characteristics, including Grain Size, Atterberg Limits, Permeability, percent moisture, dry density, porosity and USCS classification were tested for locations: Monitor Well (MW)9, 10, 17, 18, 19, Lagoon0, 1, 2, 3, shown in Table 1 and 2 of appendix F. The density, moisture and percent compaction of subbase soils were tested during CAMU construction, shown in Table 4 of appendix F. Geologic cross-sections are provided in Appendix T.

E.1.3 Characterization of Waste Contaminated Soil Present in the Landfill Unit

Provide a description of the type, quantity and characteristics of the waste and/or contaminated soil remaining in the unit.

Review Notes: *Electroplating sludge(F006) and halogenated solvents(F002) wastes which are also contaminated with cyanide and various metals. Draw 2 provides the quantity and waste type of each remediated area.*

E.1.4 Initial Closure Activities

Provide a detailed description of the following initial activities carried out in closing the unit as a landfill:

- Remove of waste and contaminated soil;
- Stabilization of material remaining in the unit; and
- Use of structural fill material to establish final contours.

Review Notes: *Remedial action was approved by the Illinois EPA with the issuing of the RCRA Hazardous Wase Management Post-Closure permit for the CAMU on April 11, 2000. Four HWMUs, four SWMUs and two areas of concern were remediated by excavating contaminated soils and deposing these soils in the CAMU landfill. The four HWMUs are Lagoon 1, Lagoon 2, Lagoon 3, and the Shawnee Building. The seven SWMUs are Lagoon 0, Lagoon 1A, Cyanide Treatment Vault, Wetland 1 and 1A and Wetland II and III. Two areas of concern are the outfall pipe and the wastewater release area. The wastewater release area was because a pipeline that transfers wastewater from the manufacturing plant to the WWTP ruptured during the construction of CAMU. All the remediated area can be identified on Drawing 2 except the wastewater release area; however, this area was described in the .*

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

Waste sludges in the listed 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.

Cyanide Treatment Vault Area

The concrete cyanide vault was remediated by breaking up and removing the concrete vault. Approximately 2 feet of contaminated soil was excavated from the floor and sidewalls of the cyanide treatment vault.

Shawnee Building

The remediation was completed by cutting and removing a section of the concrete slab measuring approximately 25 feet by 25 feet and excavating the soil below to a depth of approximately 3 feet.

Wetland Area

The wetland areas were backfilled and graded with wetland soils that were stockpiled during the excavation of a pond on the former Stephenson Service Co. property, which was purchased by MPC.

Outfall Pipe

An abandoned outfall pipe from the wastewater treatment plant (WWTP) to the Pecatonica River was excavated. An area approximately 30-feet long, 10-feet wide and 10-feet deep was excavated.

Wastewater Release

During construction of the CAMU, a pipeline that transfers wastewater from the manufacturing plant to the WWTP ruptured (Illinois EPA Incident No. 20001377). Approximately 3 cubic yards of soil were contaminated as a result of the spill. This contaminated soil was removed and placed in the CAMU.

After waste was removed, each area was backfilled with clean soils, compacted in lifts and the surface graded to drain. An engineered barrier was installed over the cyanide Treatment vault area. Additional excavation details regarding the waste types and quantities are provided on Drawing 2. The final grading is shown on Drawing 2 in Appendix J. A run-off control system was also installed around the CAMU to prevent erosion of the CAMU cover. In August, 2001, FVD submitted the Closure Documentation Report to the Illinois EPA to formally close the CAMU landfill.

E.1.5. Details Associated with the Closed Unit

Provide a detailed description, as-built drawings, cross-sections, and scaled drawings of the overall unit that includes/shows the following. Of special concern is the vertical elevations associated with each component of the unit. Note: the specific information regarding any leachate collection system, leak detection system and/or gas management system present in the landfill that must be described/shown is identified in Sections E.3 thru E.5 below.

1. The soils underlying the unit;

Review Notes: *Information regarding the soils underlying the unit is provided in Appendix F.*

2. The bottom liner system of the unit (if any is present);

Review Notes: *The liner system is double composite liner system consisting, from top to bottom of a geocomposite (leachate collected layer), a 60 mil textured HDPE geomembrane, a second geocomposite(leak detection layer), a second 60 mil textured HDPE geomembrane, a geosynthetic clay liner (GCL) and 1-foot of compacted fine ground soil.*

3. A description of the base of the unit if it has no constructed liner system;

Review Notes: *Not applicable.*

4. Any permeable zones around or beneath the landfill and a description of the procedures used to seal off these zones;

Review Notes: *The application indicates no permeable zones were noted around or beneath the CAMU in the Construction Documentation Report(Appendix Q). During the construction of the subbase, a 2-foot-thick bridging layer was installed to elevate the bottom elevation for the Phase 1 sump prior to the liner installation because of high groundwater conditions.*

4 Any cut-off walls or slurry walls constructed outside the landfill boundaries to address migration of leachate or landfill gas from the landfill;

Review Notes: *No cut-off walls or slurry walls constructed outside the landfill boundaries.*

5 The final cover system over the unit;

Review Notes: *The final cover consists from top to bottom of a 6-inch topsoil vegetative layer, 18-inches rooting zone, geocomposite drainage layer; 40 mil HDPE textured geomembrane, geosynthetic clay liner (GCL) and a 6-inch venting layer above the wases. A double liner was constructed consisting from top to bottom of a geocomposite (leachate collected layer), a 60 mil textured HDPE geomembrane, a second geocomposite (leak detection layer), a second 60 mil textured HDPE geomembrane, a GCL and 1-foot of compacted fine ground soil.*

6 The final contours established for the unit; and

Review Notes: *The final contours shown on Drawing 7A of Appendix C have been reviewed.*

8. The run-on and run-off control systems of the unit.

Review Notes: *The final cover has slopes designed 6:1 near the landfill crest and 4:1 adjacent to the berm and sloped to a drainage ditch routing flow to two sedimentation basins.*

E.2 Contact Person

Mr. James Stenberg
Modern Plating Corporation
701 South Hancock Avenue
Freeport, Illinois 61032
(815) 235-3111

E.3 Operation of the Leachate Collection System

E.3.1 Quality of Leachate in the Leachate Collection System

1. The leachate needs to be analyzed for the parameters listed below, and the results of annual analyses conducted on representative samples of leachate must be provided in the permit application. This will give an indication of the potential contaminants in a subsurface release from the unit to the groundwater. The leachates need to be analyzed for:
   a. Those constituents for which a public or food processing water supply standard has been established in 35 IAC 302;
   b. Those constituents for which a groundwater quality standard has been established in 35 IAC 620;
   c. The 51 organic chemicals in drinking water described in 40 CFR 141.40.
   d. Any other contaminants expected to be present in the leachate, based on the characteristics of the waste and materials present in the unit.

A list of all the above contaminants is provided as Attachment 1 to this document. This list may be reduced if information is provided indicating that certain listed contaminants are not expected to be present in the leachate.

Review Notes: *Leachate samples have not been analyzed at any time since the construction of the CAMU as leachate is reported to be 0 since 2010.. The pumping log in Appendix M shows no leachate has been collected since 2011. In accordance with the RCRA Post-Closure Permit (Illinois EPA, 2011), representative samples of leachate from Phases 1 and 2 should be collected and analyzed annually. The sampling parameters was provided in Table 1 of Attachment D of the RCRA Post-Closure Permit (Illinois EPA, 2011).*

2. If the list of analytes has been reduced, provide an analysis for all constituents listed in E.3.1.1 each time the post-closure permit is renewed. Compare the reduced list, to the full list. If no new parameters are detected, the application can propose to resume analyzing leachate for the previously approved reduced list. If any new parameters are detected, they must be added to the reduced list and the list of groundwater monitoring parameters.

Review Notes: *MPC indicate there was no leachate collected since 2010. Attachment H list the parameters required for leachate analysis, which is identical to Table 1 in Section E.3.1 of the application.*

3. If there is more than one leachate sump but the application does not propose to analyze the leachate from each sump, provide justification for how the leachate sample(s) are considered "representative" for a given landfill.

   Review Notes: *MPC indicate there was no leachate collected since 2010.*

4. Describe the procedures used to collect, handle, and analyze the leachate samples discussed above. All such efforts must be carried out in accordance with procedures approved/established by Illinois EPA or USEPA.

   Review Notes: *The facility must collect representative samples oof leachate from Phases 1 and 2 annually and analyze them individually. Samples must be collected into lab-provided containers and kept on ice until delivered to the laboratory using chain-of-custody procedures.*

E.3.2. Leachate Collection System Within the Landfill

1. Identify the general components of the leachate collection system within the landfill (includes the filter layer, leachate collection layer, leachate collection trenches, the leachate collection pipes, leachate level monitoring locations, leachate collection sumps, leachate collection wells, leachate removal pumps or other equipment used to remove leachate, manholes, clean-outs, etc.).

   Review note: The facility described how leachate collection system designed to collect leachate. A piping and instrumentation diagram was not prepared as part of the design. The facility stated detail drawing of the construction of the leachate collection system and leak detection system were provided in Appendix C, drawing 11R and 12. Drawings 11R shows the construction of the leachate collection system. Drawing 11R has been reviewed. However, drawing 12 in Appendix C was not found in the application.

2. Provide a detailed description of the procedures used to construct the leachate collection system within the landfill. Provide specifications and as-built drawings (plan view, detail and cross-sectional) of the installed system. Identify the contours of the top of the liner system including any leachate collection trenches; the elevation of the lateral leachate collection pipes; the screened interval of any leachate collection wells or monitoring points; and the elevation of the bottom of the leachate collection sumps, wells, manholes and clean-outs.

   Review note: Appendix Q documented how the leachate collection system was constructed. MPC indicates details of the construction of the leachate collection system and leak detection system are provided in Appendix C, on Drawing 11R and 12. But Drawing 12 in Appendix C was not found in the application.

3. Provide detailed information regarding all equipment (pumps, monitoring equipment, etc.) associated with the leachate collection system within the landfill. Specifically:
   a. Provide (as appropriate) the make, model and specifications for each piece of equipment;
   b. Identify each piece of equipment on a piping and instrumentation diagram; and
   c. Describe the operational function and capabilities of each piece of equipment.

   Review note: MPC indicates Appendix Q contains equipment information and the construction details of the leachate collection system. But Itemized equipment information is required in this part. This information must include the make, model and specifications for each piece of equipment and the operational function and capabilities of each piece of equipment. MPC indicated a piping and instrumentation diagram was not prepared as part of the design information.

4 If the landfill was designed to meet the requirements of 35 IAC 724.401, then an engineering report must be provided demonstrating that the system was constructed and will be operated in such a manner to prevent the leachate depth over the top liner from exceeding one foot. Appropriate calculations must be provided as part of this demonstration along with justification of all assumed parameters and of the numerical techniques used in making the demonstration.

Review note: The landfill was designed to meet the requirements of 35 IAC 724.401. This application indicates the engineering report for the CAMU was included in the Plan of Operation for the Corrective Action Management Unit at the Modern Plating Corporation Facility (FVD,1998). However, this engineering report was not in this application. MPC must submit the engineering report demonstrating that the system was constructed and will be operated in such a manner to prevent the leachate depth over the top liner from exceeding one foot. Appropriate calculations must be provided as part of this demonstration along with justification of all assumed parameters and of the numerical techniques used in making the demonstration. Construction certification was included in the Closure Document Report in Appendix R.

5 If it was not necessary for the landfill to meet the requirements of 35 IAC 724.401, then information must be provided regarding the maximum leachate levels which will be present at the leachate removal points and throughout the landfill. An engineering report/analysis of the leachate levels which will be present in the landfill must be provided as well as information from past operations of the leachate collection system which will verify the projected levels.

Review note: Not applicable.

E.3.3. Leachate Collection System Outside the Landfill

1. Identify the general components of the leachate collection system which allow for the removal and of the leachate and its storage on-site (includes the piping from each leachate pump to the top of each leachate sump/well, the piping and associated

appurtenances which transfer the leachate to a final storage tank, any pump stations needed in this transfer, and the tank where the leachate is eventually stored). In addition:

a. Provide a detailed description of the procedures used to install the components of leachate collection system mentioned above;
b. Provide specifications, piping and instrumentation diagram, and as-built drawings (plan view, detail, elevations and cross-sectional) of these components.
c. Identify the sample point(s) used to collect leachate samples on the piping and instrumentation diagram.
d. Indicate the locations of the leachate collection system sampling points on a scale drawing of each landfill. Identify the sample points by both the facility and Illinois EPA identification numbers for each sample point.

Review Notes: *Installation and construction procedures are documented in the Construction Documentation Report in Appendix Q. The application indicates that leachate is extracted through underground piping from two sumps located in the southeast and southwest corner of the Phase I and Phase 2 of the CAMU landfill. The arrangement is shown on Drawing 12 in Appendix C. Drawing 12 in Appendix C was submitted in June submittal.*

2. Provide detailed information regarding all equipment (pumps, monitoring equipment, etc.) associated with the leachate collection system outside the landfill. Specifically:
   a. Provide (as appropriate) the make, model and specifications for each piece of equipment;
   b. Identify each piece of equipment on a piping and instrumentation diagram; and
   c. Describe the operational function and capabilities of each piece of equipment.

Review Notes: *The facility states details of the construction of the leachate collection system and leak detection system including manufacturer specifications are fully described in Section 12 of the Construction Documentation Report in Appendix Q. The facility must list and describe all equipment (pumps, monitoring equipment, etc.) with detailed information required in this section.*

E.3.4. Management of Leachate Collection System (LCS)

Describe how the LCS is managed. Discuss how all parts of the leachate collection system are operated.

1. Provide piping and instrumentation diagrams and other schematics which depicts the overall leachate collection system, from the pump within each leachate collection sump/well to the leachate accumulation tank. For each leachate collection sump/well, identify:
   a. The approximate elevation of the bottom of the sump or landfill at that location,
   b. The leachate elevation which activates the pump in each sump or extraction well,
   c. The leachate level which activates the pump within the sump/well,
   d. The leachate elevation when the pump shuts off, and

e. A description of the instrumentation in place so that the amount of leachate removed from a given sump/well over a given time period can be determined.

Review Notes: *If leachate accumulates above the 1-foot pump operating level, equivalent to an elevation of 757.0 feet, it is pumped out and the amount of flow recorded. Drawing 11R in Appendix C shows the detailed design and the elevations requested.*

2. Describe the procedures which will be followed to document/record all aspects of the management of the leachate collection system(s). At a minimum, the results of leachate quality analyses and the amount of leachate removed from a given sump/well each month must be documented in the operating record.

Review Notes: *Table B-1 shows post-closure inspection schedule and log for CAMU. Table B-2 shows post-closure maintenance plan for CAMU. The results of annual leachate sampling are filed by the facility and submitted to Illinois EPA. Annual maintain report of leachate collection and detection system are required in the coming up Permit.*

3. Describe how the collected leachate will ultimately be managed and provide copies of the permits in place to take the leachate to an off-site facility for treatment or disposal.

Review Notes: *Leachate is extracted from the sumps by pumps housed in the Leachate Pump Building adjacent to the CAMU. The facility indicates that the arrangement is shown on Drawing 12, Appendix C. Drawing 12 in Appendix C was provided in Jue submittal. The pumps discharge to a pretreatment facility operated by MPC. The pretreatment facility removes metals and cyanide. Then, the pretreated water is discharged to the Freeport Publicly Owned Treatment Works (POTW). The wastewater discharge permit FR050196(valid from Jan. 1,2017 to Dec. 31, 2021) is provided in Appendix S.*

E.3.5. Summary of Leachate Management Program Conducted to Date

Provide information addressing the items in Section E.3.4 regarding the leachate management program implemented during the past ten years. This information should discuss the efficiency of the existing leachate management program or identify deficiencies which must be addressed to ensure leachate is adequately managed in the landfill.

Review Notes: *The facility indicates information about leachate management is submitted to Illinois EPA annually and no deficiencies have been noted regarding the leachate management program. The facility is required to submit both leachate data and leachate system maintain report annually to demonstrate Leachate Management Program conducted to date.*

E.4 Operation of the Leak Detection System: 724.402, 724.403 and 724.404

This subsection must be addressed if a Leak Detection System (LDS) is present in the landfill. The LDS must be capable of detecting, collecting and removing leaks through the upper liner system at the earliest practicable time throughout all areas of the landfill. The LDS must be constructed of a drainage layer along with sumps and pumps of sufficient size to collect and remove liquids from the sump and prevent liquids from backing up into the drainage layer.

1. Each landfill unit must have its own set of LDS sumps.

2. Each LDS sump and associated removal system must be designed so that volume of liquid in the LDS sump can be measured and as well as the volume of leachate removed from the sump.

Review Notes: *The CAMU is divided into two phases (Drawing 4). For each phase, the LDS sump is separate from and below the LCS sump (Drawing 11R). LCS and LDS share a pump, but the piping and valving are configured such that the two systems remain independent. Drawing 12 should show the pumps and piping but can not be found in the submittal. The flow meter found in Drawing 11R in Appendix C are used to measure the volume of leachate removed from the sump.*

E.4.1. Description of the Leak Detection System Within the Landfill

Provide an engineering report describing how the leak detection system was constructed and will be operated to ensure the requirements of 35 IAC 724.401 are met. Among other things, this report must:

1. Identify the general components of the leak detection system within the landfill (includes the drainage layer, the leachate collection trenches, the leachate collection pipes, leachate level monitoring locations, leachate collection sumps; manholes, clean-outs, etc.).

2. Provide a detailed description of the procedures used to construct the leak detection system. Provide specifications and as-built drawings (plan view, detail and cross-sectional) of the installed system. Information of special importance includes: the contours of the top of the liner system; the elevation of the leachate collection pipes; and the elevation of the bottom of the leachate collection sumps, manholes and clean-outs.

3. Provide detailed information regarding all equipment associated with the leak detection system (pumps, monitoring equipment, etc.) within the landfill. Specifically:

   a. Provide information regarding the make, model and specifications of each piece of equipment;

   b. Identify each piece of equipment on a piping and instrumentation diagram;

   c. Describe the operational functions and capabilities of each piece of equipment.

4. Provide the pump operating level for each LDS sump within each landfill unit. This is the maximum level of leachate which can accumulate in each LDS sump before the pump within the sump is activated and leachate is removed from the sump.

A. This level can be no more than the depth of leachate that can accumulate within the LDS sump without allowing any leachate to back-up into the drainage layer.

B. This level must also minimize the hydraulic head on the liner of the LDS sump.

c. Development of the pump operating level for each LDS sump should also take into account the pump activation level and the sump dimensions.

5. Provide the action leakage rate (ALR) (in gallons per acre per day) for each LDS sump. The action leakage rate is the maximum design flow, modified by a factor of safety, that the LDS can remove without the fluid head on the bottom liner exceeding 1 foot. The action leakage rate must include an adequate factor of safety to allow for uncertainties in the:

a. Design; construction; layout and operation of the system;

b. Characteristics of the waste and leachate in the landfill;

c. Likelihood and amounts of other sources of liquids in the LDS and

d. Proposed response actions

Examples of uncertainties/concerns with the LDS include decreases in the flow capacity of the system over time resulting from siltation and clogging, rib layover and creep of synthetic components of the system, and overburden pressure.

Review Notes: *An engineering report is not included in this application. The facility provided required information in each section along with Drawing 11R, Appendix C and Construction Document Report in Appendix Q.* ***The action leakage rate (ALR) is permitted at 2,434 gallons per day for each phase.***

More detailed inspection and maintenance plans are necessary as there is very little documentation and procedures available regarding maintenance of the LCS or LDS or other equipment and system. Tables B-1 and B-2 lists Inspection and maintenance schedule and log and Maintenance plans, but some items are not clear on how and when conducted. For example, "Check for leaks" in Table B-1 of LCS. How would this be done?

E.4.2. Description of the Leak Detection System Outside the Landfill

1. Identify the general components of the leak detection system which allow for the removal of the leachate from the landfill and its storage on-site (includes the piping from each leachate pump to the top of each leachate sump/well, the piping and

associated appurtenances which transfer the leachate to a final storage tank, any pump stations needed in this transfer, and the tank where the leachate is eventually stored). In addition:

a. Provide a detailed description of the procedures used to install the components of leak detection system mentioned above.
b. Provide specifications and as-built drawings (plan view, detail, elevations and cross-sectional) of these components.

Review Notes: *The facility indicates specification, Specifications, installation details. and construction procedures are documented in the Construction Documentation Report (Appendix Q). Drawing 11R and 12 show plan view, detail, elevation, and cross sections of LDS system componence*

2. Provide detailed information regarding all equipment (pumps, monitoring equipment, etc.) associated with the leachate collection system outside the landfill. Specifically:

a. Provide (as appropriate) the make, model and specifications for each piece of equipment;

b. Identify each piece of equipment on a piping and instrumentation diagram;

c. Describe the operational function and capabilities of each piece of equipment.

Review Notes: *The facility indicates details of the construction of the leak detection system and leachate collection system including manufacturer specifications are fully described in Section 12 of the Construction Documentation Report in Appendix Q.).*

E.4.3. Management of Leachate Accumulating in the Leak Detection System

Describe how the LDS is managed. Discuss how all parts of the leak detection system are operated.

1. Provide piping and instrumentation diagrams and other schematics which depict the overall leak detection system, from the pump within each leachate collection sump to the leachate accumulation tank. For each leak detection sump/well, identify:

a. The approximate elevation of the bottom of the landfill at that location,
b. The pump operating level,
c. The leachate level which activates the pump within the sump/well, and
d. The leachate elevation when the pump shuts off.

Review note: The facility provides the following information, which has been reviewed and meet the requirement:

The drawings referenced in this description can be found in Appendix C. The CAMU is divided into two phases, shown on Drawing 4. The LDS sump is a separate from and below the LCS sump, shown on Drawing 11R. Various

elevations including sump bottom, pump activation elevation, and other supporting information is provided on this drawing.

The CAMU was constructed above an elevation 757.0 feet above mean sea level (ft msl). The sumps in the CAMU were constructed above an elevation of 753.5 ft msl. The interior side slopes of the CAMU were constructed to not be steeper than 3-feet horizontal to 1-foot vertical (3:1). The side slopes on the final cover were constructed to not be steeper than 4:1 adjacent to the exterior berms and not steeper than 6:1 for cover lying directly over wastes. The CAMU was 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.

2. Describe the procedures which will be followed to document/record all aspects of the management of the LDS. At a minimum, the permittee needs to provide documentation of the amount of leachate removed from a given LDS sump over a set time period, and any exceedances of the action leakage rate in the operating record.

3. Describe how the leachate collected in the LDS will ultimately be managed and provide copies of the permits in place to take the leachate to an off-site facility for treatment or disposal.

Review note: The facility described how leachate collected in LDS and the procedures to be followed to document the management of the LDS, which was 0 since 2010.

E.4.4. Recent Operation of the Leak Detection System

Provide information addressing the items discussed in Section E.4.3 regarding the operation of the LDS during the past ten years. This information should discuss the efficiency of the existing LDS or identify deficiencies which must be addressed to ensure system is operating properly.

Review note: The facility indicates no deficiencies regarding the leachate detection system and operating data for the last 20 years is provided in Appendix M. Since 2011, no leachate has been generated.

E.5 Operation of the Gas Monitoring/Collection System

This subsection must be addressed if the closed unit has a landfill gas monitoring/collection system.

Review note: The CAMU is equipped with a passive gas venting system. The gas is neither collected nor monitored.

E.5.1. Detailed Description of the Landfill Gas Collection System

The following information needs to be provided regarding any landfill gas collection system at the facility (in addition to drawings, it is also important to include text

describing the various aspects of this system and the chronological history of the installation of this system).

1. A map and detailed drawings showing the location of the collection points and the layout and construction details of the collection system.

2. A description and specifications for all machinery, compressors, flares, piping and appurtenances in the system.

3. A piping and instrumentation diagram as well as other schematics to depict the system's operation.

4. A description of how the landfill gas collection system operates. Describe the information which will be monitored, evaluated and recorded regarding the operation of the system. Frequent evaluation of this information will be essential in ensuring the system is operating effectively and will also give insight into any adjustments that need to be made to the operations of the system.

5. Documentation or assurance that the gas collection system meets the following standards:

   a. The system is designed and will be operated such that the limits described in 35 IAC 811.311(a)(1), (a)(2) and (a)(3) will not be exceeded;

   b. The gas collection system will transport gas to a central point or points for processing for beneficial uses or disposal in accordance with the requirements of 35 IAC 811.312;

   c. The gas collection system has been designed to function for the entire design period;

   d. All materials and equipment used in construction of the system have been rated by the manufacturer as safe for use in hazardous or explosive environments and shall be resistant to corrosion by constituents of the landfill gas;

   e. The gas collection system has been designed to withstand all landfill operating conditions, including settlement;

   f. Provisions have been made for collecting and draining gas condensate to a management system meeting the requirements of 35 IAC 811.309;

   g. The gas collection system will not compromise the integrity of the liner, leachate collection or cover systems; and

   h. The gas collection system shall be equipped with a mechanical device, such as a compressor, capable of withdrawing gas, or has been designed so that a mechanical device can be easily installed.

6. A description of the criteria that will be used to determine when operation of the gas collection system may be discontinued.

7. A description of the testing procedures that will be used to assure that the lines from the collection points to the gas processing or disposal facility are air tight.

8. Identify where condensate in the system will be collected and then stored prior to shipment off-site for treatment or disposal. Include a description of all equipment associated with collection and storage of the condensate.

Review note:

The facility provided the following information in the application which has been reviewed:

The CAMU has a passive gas management system. The system was constructed in accordance with the approved design as presented in the Plan of Operations (FVD, 1998) Details of the construction of the gas monitoring/collection system and leak detection system are provided in Appendix C, Drawing 7B. The gas venting system is shown on Drawing 5 of Appendix C. The gas venting system was designed to allow gases produced by the waste in the CAMU to passively vent into the atmosphere to prevent gas buildup from occurring beneath the geomembrane cap. The gas venting system consists of 6-in diameter slotted polyethylene pipe installed in the grading/gas venting layer. At four locations along the gas vent pipe, a polyvinyl chloride (PVC) tee connected to a 6-in diameter Schedule 80 PVC riser, and a 180° PVC elbow were installed to allow the gas to vent into the atmosphere. The construction of the gas vent is shown on Drawing 5 of Appendix C.

Maintenance and inspections of the gas monitoring/collection system and leak detection system are conducted on a regular basis as outlined in Tables B-1 and B-2. Gas monitoring is not required in the current RCRA Post-Closure Permit for Modern Plating Corporation, Permit No. 1770200010, RCRA Log No. B-167R, issued June 9, 2011.

E.5.2. Landfill Gas Monitoring Plan

Provide the following information regarding the landfill gas monitoring system's ability to monitor the buildup and composition of landfill gas.

1. A narrative and plan sheets describing the most likely paths of migration for gas generated by the unit and demonstrating that the proposed gas monitoring program will detect any gas buildup and/or migration.

2. Detailed drawings and material specifications of the four types of gas monitoring devices required (i.e., devices within the waste unit, below ground devices around the unit, air ambient monitoring devices and continuous air monitoring devices within buildings) on site or near the facility if there is an indication of gas.

3. A map showing the locations of the below ground monitoring devices and the continuous air monitoring devices.

4. Documentation that the various types of below ground gas monitoring devices:

   a. Are placed at intervals and elevations within the waste to provide a representative sampling of the composition and buildup of gases within the unit.

   b. Are placed around the unit at locations and elevations capable of detecting migrating gas from the ground surface to the lowest elevation of the liner system or the top elevation of the groundwater, whichever is higher.

   c. Are constructed from materials that will not react with or be corroded by the landfill gas.

   d. Have been designed and constructed to measure pressure and allow collection of a representative sample of gas.

   e. Are constructed and maintained to minimize gas leakage.

   f. Do not interfere with the operation of the liner, leachate collection system or delay the construction of the final cover system.

5. A description of the procedures and prerequisite weather conditions for performing ambient air monitoring including the location standards for placement of the monitoring devices and maximum wind speed.

6. A description (narrative or graphic) of the location of the continuous air monitoring devices inside the buildings within the facility (and nearby buildings if applicable).

7. A schedule specifying the frequency and minimum duration of gas monitoring.

8. Identification of the parameters that samples from each type of monitoring device will be analyzed.

9. A description of the procedures which will be used to collect and analyze the various air samples to be obtained as part of the landfill gas monitoring program.

Review note:

The CAMU has a passive gas management system. Gas monitoring is not required in the current permit.

E.5.3. Landfill Gas Disposal/Processing System

Review note:

No gas disposal/processing system exists on site.

E.5.4. Summary of the Landfill Gas Collection / Monitoring / Processing Systems

Review note:

No gas disposal/processing system exists on site.

E.6 Post-Closure Inspection Plan

Describe the procedures followed to inspect/ensure the functionality of everything needed to provide adequate post-closure care of the unit closed as a landfill at the facility in accordance with the RCRA requirements.

Copies of the inspection log and repair log that are used to document inspections and repairs at the facility in accordance with the RCRA requirements must be provided as part of the permit application.

Indicate that copies of the inspection log and repair log are maintained at the facility as part of the operating record and where they are located.

Review note:

Table B-1 described the equipment or area scheduled to be inspected, inspection frequency and detailed inspection activities. The equipment or area to be inspected includes leachate collection system, leak detection system, exterior of CAMU landfill (berms),run-on and run-off control(erosion control devices and sedimentation basins), final cover surface, final cover system integrity, security control devices, gas venting system, groundwater monitoring wells and horizontal and vertical control.

Table B-2 described the equipment or area scheduled to be maintained, preventive maintenance activities, corrective maintenance procedures and equipment requirements and material needs. The equipment or area to be maintained includes leachate collection system, leachate detection system, final cover, berm, environmental monitoring devices, security devices, surface water management and erosion control structures, access roads and gas vents.

E.6.1. Inspection Log

An inspection log must be maintained which includes all of the items listed below. The log must include the date and time of each inspection, the name of the inspector, notation of the observations made, and the date of any repairs or remedial actions.

Review note:

The inspection log is shown as Table B-1 which include the date and time of the inspection, the name of the inspector, and comments and action items. The repair log shown as Table B-3 include the item to be repaired and the date of the repair.

E.6.1.1. Items Inspected

The plan must identify each item to be inspected in order to comply with the RCRA requirements. These include, but not necessarily limited to:
1. All RCRA regulated units;
2. Monitoring equipment;
3. Safety and emergency equipment;
4. Security control devices;
5. Erosion damage;
6. Cover settlement, subsidence and displacement;
7. Vegetative cover condition;
8. Integrity of run-on and run-off control measures;
9. Cover drainage system functioning;
10. Leachate collection and removal system;
11. Leak detection system;
12. Gas monitoring/extraction system;
13. Condition of the groundwater monitoring wells;
14. Benchmark integrity; and
15. All operating and structural equipment that are vital to prevent, detect, or respond to environmental or human health hazards.

Review note: The listed items inspected in Table B-1 meet the requirement.

E.6.1.2. Types of Problems

For each item to be inspected as identified above, describe the types of problems (e.g. malfunctions or deterioration) the inspector must look for during an inspection (e.g. inoperable sump pump, leaking fitting, cracks, eroding berm, etc.).

E.6.1.3. Inspection Frequency

Identify the inspection frequency for each item in the log. In addition, provide justification for the inspection frequency proposed for each item. (This justification should be separate from the actual inspection log.). The frequency of inspection needs to be based on the rate of possible deterioration of equipment and the probability of an environmental or human health incident if the deterioration, malfunction, or operator error goes undetected between inspections.

Indicate the facility will be inspected within 24 hours of any rain fall event of 2 or more inches in 24 hours to detect evidence of any of deterioration, malfunctions, or improper operation of run-on and run off systems. Indicate that appropriate corrective action shall be taken if problems, including erosion, blockage of the channels, slope failure, etc. are observed.

Review note:

Inspection frequency and the types of problems were included in the inspection log and repair log template. (Table B-1).

E.6.2. Repair Log:

The repair log must be used to schedule and record repairs (deterioration, or malfunction of equipment or structures) revealed by an inspection of the items listed in the inspection log. The repair log must include the following items:
1. The item needing repair;
2. The problem identified during the inspection that needs repair;
3. The date the inspection took place;
4. The name of the person who conducted the inspection;
5. The name of the person who made the corrected repair;
6. The date the repair was made;
7. The efforts carried out in making the repair;
8. Any other appropriate comments.

Most repairs should be made at the time it is determined to be necessary and all repairs should be made within 24 hours. The timeliness of the repair is dependent on the potential impact the problem needing repair may have on protecting human health, the environment, and the safe operation of the facility.

Review note: The repair log in Table B-3 includes all the listed information.

E.6.3. 24 Hour Reporting (702.152(f), 703.245(b))

Describe the how the Permittee will take the following actions if an inspection reveals any noncompliance with the permit which may endanger health or the environment:. 1) report the required information about the incident orally within 24 hours from the time the Permittee becomes aware of the circumstances, and 2) provide a written description of the incident within 5 days of the time the Permittee becomes aware of the circumstances.

Review note:

MPC shall report to the Illinois EPA any noncompliance that may endanger health or the environment. Any such information shall be reported orally within 24 hours from discovery. This report shall include the following:

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

(2) Information concerning any release or discharge of any hazardous waste or of a fire or explosion at the HWA facility, not only which could threaten the environment or human health outside the facility, because usually the possibility of the threaten to the environment or human health outside the facility cannot be determined instantly and is required further evaluation after release happen.

The description of the occurrence and its cause shall include:

1) Name, address, and telephone number of the owner or operator;
2) Name, address, and telephone number of the facility;
3) Date, time and type of incident;
4) Name and quantity of materials involved
(5) The extent of injuries, if any;
(6) An assessment of actual or potential hazards to the environment and human health outside the facility, where applicable; and
(7) Estimated quantity and disposition of recovered material that resulted from the incident.

A written submission shall also be provided within 5 days of the discovery. The submission shall contain a description of the noncompliance and its cause; the period of noncompliance including exact dates and times and if the noncompliance has not been corrected; the anticipated time it is expected to continue; and steps taken or planned to reduce and prevent recurrence of the noncompliance. The Illinois EPA ma waive the five day written notice requirement in favor of a written report within 15 days in accordance with 35 IAC 702.152 and 703. 245.

E.7 Post-Closure Monitoring Plan

Describe the monitoring to be conducted during the post-closure care period, including, as applicable, the procedures for conducting and evaluating the data gathered in accordance with the RCRA requirements.

Indicate that copies of the monitoring reports and data are maintained at the facility as part of the operating record.

E.7.1. Facility Controls

Indicate that the benchmarks used to identify the location of disposal units, solid waste management units, and units/areas covered by an Environmental Land Use Controls (ELUCs) or the Uniform Environmental Covenants Act (UECA) are surveyed at least once every five (5) years.

Review note: *The Survey Plat with Benchmarks in Appendix J was dated on July 17, 2001. It is required that the facility must survey the benchmarks at least once every five (5) years so the facility must update it to the latest version within recent five years. No survey of the CAMU has been conducted since closure in 2001. It is required that the facility must survey the CAMU and evaluate the current conditions of the CAMU based on the any settlement or displacement of benchmarks. Such evaluation also must include the thickness of the cover system and adequacy of the cover system in general. Leachate collection systems and groundwater monitoring well survey and assessment should also include in the re-evaluation of the current o conditions of the CAMU.*

E.7.2. Surveys and Corrective Action

Identify the units at the facility that will be surveyed every five years. The following units need to be surveyed at least once every five years:

- Units subject to post-closure requirements per 35 IAC 724.210(b)
- Solid Waste Management Units (SWMUs) with cover systems and/or engineered barriers
- Units/Areas subject to an Environmental Land Use Controls (ELUCs) or the Uniform Environmental Covenants Act (UECA).

Review note:

Drawing 2R identified the units at the facility and is dated in 2021. See earlier comment.

E.7.2.1. Provide the following for the units identified in Item E.7.2:

1. A copy of the survey provided to the Illinois EPA when the unit was certified closed.
2. A copy of the survey for each unit generated every five years since the unit was closed that shows the horizontal and vertical extent of the unit, drainage control structures, leachate collection wells, and groundwater monitoring wells.
3. Scale drawing(s) (1 inch = 200ft) and cross sections that identify those areas of the cover system or engineered barrier that have changed 1 foot or more in elevation since the unit was closed.
4. If corrective action was required in response to a release, damage to the cover system, settlement, erosion, stressed vegetation, or damage to a leachate well, groundwater monitoring well, or benchmark since post-closure care began, identify the date and location of the corrective action on the scale drawings required above. Also, provide copies of the inspection and repair logs that includes the date each incident was discovered, a description of the incident & corrective action taken, and the date corrective action was completed.
5. If corrective action occurred in the same general area 2 or more times since post-closure began, discuss the actions the permittee has implemented to prevent this from happening again.

Review note: A new Survey map must meet the conditions above.

E.7.3. Leachate Collection System

Describe how the information about the leachate collection system for each unit identified in E.7.2 is monitored, evaluated, and recorded. Frequent evaluation of this information is essential in ensuring the system is operating effectively and will also give insight into any adjustments that need to be made to the operations of the system.

E.7.3.1. Leachate Quality

Describe the procedures which are followed to monitor the quality of the leachate in the unit on a regular basis during the post-closure care period (including sample collection,

sample handling and sample analysis). Discuss if the concentrations of the constituents in the leachate have changed during the post closure period and any actions taken in response.

These samples should be collected quarterly for the first two years at which time the frequency can be decreased to semi-annually. The samples must be analyzed for the constituents described in Item E.3.1 above.

1. Summary of Sample Results: Provide a summary table of the leachate sampling results for each unit since post closure began for that unit. Identify the concentration for each parameter detected in each sampling event.

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

   Review note: No leachate has been generated since 2010. When present, representative samples of leachate from Phases 1 and 2 would be collected annually and analyzed individually for the parameters list in Table 1 of section E7.3.1. Section II in the renewed permit will include specific requirements (as specified in the previous permit) to maintain the leachate collection system and analyzing leachate annually.

E.7.3.2. Leachate Quantity

1. Provide a record of the amount of liquid removed from each leachate collection sump (in gallons) at least monthly after closure of the unit identified in E.7.2 above. The following information regarding leachate generation rates needs to be provided both in table form and graphically:

   a. Monthly for each year for each sump since the unit was closed
   b. Annually for each sump since the unit was closed
   c. Annually for each unit since the unit was closed

2. If the leachate generation rates are not trending downward during the post closure period, discuss why this is not happening. Provide information regarding precipitation rates during the post-closure period, as well as groundwater elevations relative to the invert of the LCS sumps.

   Review note: During post-closure monitoring, the two CAMU landfill sumps are checked for the accumulation of liquid on a monthly basis in accordance with 35 IAC 724.403(c). leachate remove rate for 2003-2020 are attached in Appendix M.

E.7.3.3. Leachate Reporting

Describe the procedures followed to electronically report the quality and quantity of leachate generated at the facility to the Illinois EPA.

Review note: The facility must report the quantity and quality of leachate generated at the facility to the Illinois EPA annually. The report must meet the requirements listed in section E.7.3.1 and E.7.3.2Annual Post-Closure Report should be submitted to summarize the activities conducted for 12-month period. As leachate sampling results are required to be sampled and reported on June 1 each year, annual report will be required to be submitted at the same time. This annual report will document the inspection, maintenance, sampling and any repair activities associated with post-closure care for a 12-month period from April to the following March each year.

E.7.4. Leak Detection System (LDS)724.402, 724.403, 724.404

Describe how the information from the leak detection system for each unit identified in E.7.2 will be monitored, evaluated, and recorded. Frequent evaluation of this information will be essential in ensuring the system is operating effectively and will also give insight into any adjustments that need to be made to the operations of the system.

E.7.4.1. LDS Leachate Quantity

1. Describe the procedures used to determine the volume of leachate removed from each LDS sump over a given time period. This determination must initially be made monthly. If the liquid level in a LDS sump stays below the pump operating level (and thus no leachate is removed during that time period) for two consecutive months, then the amount of liquids in the LDS sump need only be recorded quarterly. Similarly, if the liquid level in a LDS sump stays below the pump operating level for two consecutive quarters, the amount of liquids in the sumps need only be recorded semi-annually. Finally, if the pump operating level for an LDS sump is exceeded during the quarterly or semi-annual monitoring, then monitoring of the amount of leachate removed from that LDS sump must revert back to monthly.

2. Provide a record of the amount of liquid removed from each LDS sump (in gallons) at least monthly after closure of the unit identified in E.7.2 above. The following information regarding leachate generation rates needs to be provided both in table form and graphically:

   a. Monthly for each year for each sump since the unit was closed
   b. Annually for each sump since the unit was closed
   c. Annually for each unit since the unit was closed

3. If the leachate generation rates are not trending downward during the post closure period, discuss why this is not happening. Provide information regarding precipitation rates during the post-closure period, as well as groundwater elevations relative to the invert of the LDS sumps.

   Review note: The LDS sump is inspected in accordance with Table B-1. In the event liquid is present, it is manually pumped and routed through a flow meter and to the MPC pretreatment system. No leachate has been generated since 2010.

E.7.4.2. Action Leakage Rate (ALR)

1. Identify the Action Leakage Rate (ALR) from Section E.4 for each LDS sump, and indicate if the action leakage rate has been exceeded during the post-closure period.

2. To determine if the ALR has been exceeded, the owner or operator must convert the monthly flow rate from the monitoring data to an average daily flow rate (gallons per acre per day) for each sump. The average daily flow rate for each LDS sump must be calculated monthly during the post-closure care period, unless Illinois EPA approves a different frequency pursuant to Section 724.403(c)(2).

3. Describe the response action(s) meeting the requirements of 35 IAC 724.404 that will be implemented if the leachate removal rate exceeds the action leakage rate.

   Review note: No leakage has been observed since the CAMU was closed. If the leachate removal rate exceeds the ALR, MPC will must take the actions described in section E.7.4.2.

E.7.5. Groundwater Monitoring System

E.7.6. Gas Collection System

For units required to have a gas collection / monitoring system, describe how the information about the gas collection system for each unit identified in E.7.2 is monitored, evaluated, and recorded. Frequent evaluation of this information will be essential in ensuring the system is operating effectively and will also give insight into any adjustments that need to be made to the operations of the system.

E.7.6.1. Gas Quality

Describe the procedures followed to monitor the quality of the gas in the unit on a regular basis during the post-closure care period (including sample collection, sample handling and sample analysis). Discuss how the parameters (Methane, Pressure, Oxygen; and Carbon Dioxide) in the gas system have changed during the post closure period and any actions taken in response to those changes.

1. Summary of Sample Results: Provide a summary table of the gas sampling results for each unit since post closure began for that unit. Identify the concentration for each parameter detected in each sampling event.

2. Parameter Comparison: Describe the parameter thresholds used to adjust the gas collection system to improve overall efficiency of the system. Describe any major gas system upgrades/ overhauls since post closure began.

E.7.6.2. Gas Quantity

1. Provide a record of the amount of gas removed from each unit at least monthly after closure of the unit identified in E.7.2 above. The following information regarding gas

generation rates needs to be provided both in table form and graphically:
a. Monthly for each year for each unit since the unit was closed
b. Annually for each unit since the unit was closed

2. If the gas generation rates are not trending downward during the post closure period, discuss why this is not happening.

E.7.6.3. Summary of Results from the Gas Collection / Monitoring System

1. Describe the procedures followed to document/record information associated with the operation of the landfill gas collection, monitoring, and processing systems in the operating record.

2. Summarize the operation of the landfill gas collection, monitoring, and processing systems since the unit was closed. Describe any adjustments to the design or operation of the systems since the unit was closed.

   Review note: The CAMU has a passive gas management system with no collection or monitoring devices in the system.

E.8 Post-Closure Maintenance Plan

E.8.1. Procedures, Equipment & Materials:

Describe the preventive and corrective maintenance procedures, equipment and materials that will be required to properly maintain everything needed to provide adequate post-closure care of the unit closed as a landfill. Include the following items in the maintenance plan, as applicable:

1. Repair of security control devices;
2. Erosion damage repair;
3. Correction of settlement, subsidence and displacement;
4. Mowing, fertilization and other vegetative cover maintenance;
5. Repair of run-on and run-off control structures;
6. Maintenance of any leachate removal system(s) including the flushing of the LCS and LDS;
7. Maintenance of any gas monitoring/extraction system;
8. Replacement of groundwater monitoring wells; and
9. Surveyed benchmarks

E.8.2. Rationale

Provide the rationale which will be used to determine the need for corrective maintenance activities for each of the items mentioned above.

E.8.3. Frequency

Provide the frequency for maintaining each of the items mentioned above if it is known. This needs to include, but not be limited to:

1. The frequency for mowing, fertilization and other vegetative cover maintenance, and
2. Annual maintenance / cleaning of pumps used in the LCS, LDS, and gas collection systems.
3. The manufacturer's recommended replacement rate for the pumps used in the LCS, LDS or gas collection systems.
4. High pressure jet flushing of the LCS & LDS collection pipes and sump every 5 years.
5. Procedures and scheduling of non-routine maintenance and change-out of equipment.

Review note: Table B-2 describes the preventative and corrective maintenance, equipment requirements and materials needed for the operation and maintenance activities which will occur during the post-closure care period and state the frequency. A copy of monthly inspection and maintenance log and associated records must be submitted with the annual report.

Additional Notes:
As additional information regarding inspection and maintenance of LCS and LDS, the following and updated 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.).

E.9 Survey Plat: 724.216

The application must include documentation that a survey plat was prepared/submitted no later than the submission of the certification of closure for each disposal unit or areas where hazardous waste is left in place. The application must also describe the wording placed on the survey plat.

- The survey plat must indicate the location and dimensions of landfill cells or other disposal units/areas with respect to permanently surveyed benchmarks and the legal boundary of the facility.
- The plat must contain a note, prominently displayed that states: (1) the land has been used to manage hazardous wastes; and (2) the owner's and operator's obligations to restrict disturbance of the units containing hazardous waste in accordance with the applicable Subpart G regulations.
- The plat must be prepared and certified using the wording at 702.126(d)(1) by a professional land surveyor.
- The survey plat must be filed with any local zoning authority or authority with jurisdiction over local land use, the Illinois EPA, and recorded with the land titles.
- If the facility includes a RCRA disposal unit that is already certified closed, provide a copy of the survey plat for that unit.

Review note:

Drawing No. 1 – the Plat of Survey for the CAMU and Drawing No. 2 – Extent of Area Remediated include the listed required information above.

E.10 Notice in Deed and Certification: 703.183(n), 724.216, 724.217(c), 724.219

The application must include copies, as appropriate, of the notation recorded on the deed to the facility property, or on some other instrument which is normally examined during title search that will in perpetuity notify any potential purchaser of the property that:

- The land has been used to manage hazardous waste.
- Use of these areas is restricted.
- A survey plat and record of the type, location, and quantity of material in the disposal units or areas have been filed with the Illinois EPA, the County Recorder, and any local zoning authority or authority with jurisdiction over local land use.
- For hazardous wastes disposed prior to January 12, 1981, identify the type, location and quantity of the hazardous waste to the best of the owner or operator's knowledge and in accordance with any records the owner or operator has kept.

A certification signed by the owner or operator, that the owner or operator has properly recorded the notification must be developed after this notice has been recorded and submitted to Illinois EPA. This submittal must include a copy of the document in which the notification has been placed.

For facilities which have already filed: Provide a copy of the notice for the unit and the document in which it was placed, the required notice of or the deed, the application

should contain: a certified copy of the filed notice; the document that the notice was placed in, and certification by the owner or operator that it was properly filed.

Review note: *Newly revised standard conditions for the post closure care units to require environmental covenant (EC) to meet the requirements of 39 d of the Act will be included in Section II of the permit.*

E.11 Post Closure Cost Estimate: 703.183(p), 724.244

Provide an estimate of thc cost of completing the required post-closure care activities, based on current year costs, including all calculations and supporting information used in developing the estimate.

Review note:

- *30-year of post-closure care cost must be maintained for the facility. Further review notes regarding 30-yr of post closure care cost and financial assurance is provided as Attachment A to this review notes.*

- *The facility must :-(1)identify inspection and maintain activities done to leachate detection system and leachate collection system and the frequency of these activities in this section. The annual cost of these activities must be presented in the cost estimate; 2) update Post Closure Care cost estimate to Year 2025; 3) include additional activities required per Special Conditions must be incorporated into the revised cost estimate to be submitted along with the leachate collection system assessment workplan.*

- *The cost associated with abandonment of all groundwater monitoring well must be included in the annual Post-Closure Care cost estimates. This cost must include the reporting of well abandonment to the proper state agencies and local government. As to Maintenance and /or replacement of groundwater monitoring well, the estimate needs to be verified by GWU.*

- *At this time, the facility will be update the cost estimate based on the requirements of the renewed permit to include: (1) 30 years of post-closure care cost (no prorating by the years completed; and (2) any updates and changes necessary to activities and reporting required and the updated costs associated with such activities. The amount proposed in the application, which is $28,840 per year with 10% contingency in 202 dollar (provided in Appendix N of the application) was multiplied by multiplied by 10 years for the financial assurance table as provided in Appendix O. The letter of Credit from First National Bank and Trust for $339,960.00, which was the amount approved on September 19, 2019.*

- *The most current permit is B-167R-M-12 issued on September 19, 2019. Condition II.F.1 approved $339,960 for financial assurance based on $28,330 annual cost estimate for post-closure care cost (i.e 12 years of Post-Closure care) as of 2019. According to the MMCS, $339,960 is the most current approved post-closure care cost estimate provided in 2019 dollars. Per the*

inflation factors provided by the accountant in MMCS, $28,840 in 2019 dollars is equivalent to an inflated amount of $34,488.16 in 2025 dollars, which will result in a total of ***$413,857.02 for FA in 2025 dollars*** *as a currently approved and required amount.*

- *As indicated in Attachment A to this document, the facility must maintain 30-yaer post-closure care cost estimates for financial assurance. It is also required that the itemized costs and any requirements for the maintenance, inspection and groundwater monitoring required under the renewed permit must be updated. Thus, a compliance schedule will be set in the Special Conditions section to require to update the cost estimate to adjust for 30-years of post-closure and updated costs for such activities. Until such time that a revised cost estimate is submitted and approved, current approved closure cost estimate must be maintained.*

E.12 Financial Assurance Mechanism for Post-Closure Care: 703.183(p), 724.245

Provide a copy of the established financial assurance mechanism for post-closure care of the facility. The mechanism must be one of those described in 724.245. Contact the Illinois EPA Bureau of Land Permit Section to obtain the proper forms and instructions.

Review note: The facility must update the financial assurance to reflect the updated cost estimate.

E.13 State Mechanisms: 40 CFR 264.149, 40 CFR 264.150, 40 CFR 264.151, 40 CFR 220.14(b)(18)

If the State of Illinois assumes legal responsibility for compliance with closure, post closure, or liability requirements, or the state assures that state funds are available to cover those requirements, submit a copy of a letter from the state describing the state assumption of responsibility and including the facility EPA ID number, name, address, and amounts of liability coverage or funds for closure or post-closure care that are assured by the state, together with a letter requesting that the state's assumption of responsibility be considered acceptable.

Review note: The State does not assume legal responsibility for compliance with closure for this site. This section does not apply.

6. Section F. CORRECTIVE ACTION

F.2 Characterization of the SWMUs (703.187(a))

For each solid waste management unit identified above, submit the following information:

1. Type of unit
2. Location on the topographic map required by Item B.2 of the decision guide/checklist
3. Engineering drawings and construction details as available

4. General dimensions
5. Dates when the unit was in operation
6. Description (including physical/chemical characteristics) of the materials/wastes managed in the unit
7. Quantity or volume of waste managed in the unit, if known
8. A description of: (1) the soil types present at the unit; and (2) the geology of the area where the unit is located.
9. An indication of whether the wastes managed in the unit have been removed or still remain in it.

Review note:

The above listed information is provided in Table F-2 except the geology of the areas where the unit is located. Cross section is provided as a part of groundwater Information in Appendix T.

F.3 Characterization of Releases from SWMUs (703.187(b))

Provide all available information on whether or not any releases have occurred from each of the SWMUs identified above. Reasonable efforts to identify releases must be made, even if releases have not been verified. A release may include: spilling, leaking, pumping, pouring, emitting, emptying, discharging, injecting, escaping, leaching, dumping or disposing into the environment. If a determination is made that there has not been a release from a given SWMU, then a description of the efforts and information used to reach this conclusion must be provided.

Review note:
In Section F.3 the facility provided a summary of remedial actions provided for the HWMUs, SWMUs, and AOCs. A copy CAMU closure Documentation report provided in Appendix Q

F.4 Information Required for Renewal Applications (703.187(c))

Facilities seeking a renewed RCRA permit have likely completed a substantial amount of corrective action under the original permit. Illinois EPA has only been authorized to implement the corrective action program in RCRA permits since April 1990; the USEPA portion of permits issued before this date contained corrective action requirements. For permits issued before April 1990, Illinois EPA likely does not have a complete file of corrective action efforts carried out at the facility, as such efforts were overseen by USEPA. However, for permits issued after April 1990, Illinois EPA already has a complete file of all corrective action efforts carried out to date at the facility.

A summary/description of the corrective action efforts completed to date at the facility must be provided in the application. The level of detail of this summary/description will be dependent on whether Illinois EPA oversaw these corrective action efforts and thus has a complete file of these efforts already. This summary/description will create an administrative record adequate to support the corrective action requirements eventually

placed in the renewed permit and will form the foundation for determining future corrective action efforts to ensure the requirements of 35 IAC 724.201 are met.

F.4.1. Required Information if USEPA Oversaw Initial Corrective Action Program

***Review note**: Corrective action is overseen by Illinois EPA. Therefore, Section F.4.1 does not apply.*

F.4.2 Required Information if Illinois EPA Oversaw the Initial Corrective Action Program

Facilities which carried out corrective action under the requirements of the Illinois EPA portion of the original permit must provide the following information regarding corrective action efforts at the facility:

Review note: The submittal indicated a chronological list of all documents submitted to the Illinois EPA regarding corrective action activities is provided in Table F-1. Copies of all letters received from the Illinois EPA, regarding corrective action activities, are provided in Appendix L and have been reviewed.

With the closure documentation and information included in Section F, majority of corrective action section is considered technically complete. However, it has come to this review that the current groundwater contamination and any residual contamination still remains at HWMUs or SWMUs may be a potential concern for the indoor inhalation pathway.

As TACO was revised in 2013, the indoor inhalation pathway was never evaluated for this facility at the time of the closure of the HWMUs and completion of CAMU development.

Additional Illinois EPA Initiated Comment Regarding Corrective Action: Indoor Inhalation from any contamination form the past resales include the SWMUS completed Corrective Action. As the some of the contaminants at previously identified SWMUS included chlorinate contaminates, the facility must prepare propose a plan to assess any need for indoor inhalation at the facility from any contamination still remaining at the facility.

7. Conclusions and Recommendations

As discussed at the begging of the review notes, the renewal permit for Modern Plating should be issued with compliance schedule to meet the deficiencies and adianta conditions discussed in the review notes as below:

5-Year Survey of CAMU

Condition II.B. will require to submit a survey of CAMU every 5-years starting by April 2026.

This is required for the length of this permit (2 times during the permit duration) to assess the CAMU's current conditions. Per FOS email dated July 26, 2025, there was some concerns regarding the elevation changes (some depression of the CAMU). As the survey was done at the time of the closure in 2001(approximately), another round of survey will determine if the changes in elevation has stabilized or not. As the leachate has been reported as 0 gallon generated since 2011, there were some concerns at the maintenance of this CAMU. Additional data such as this and annual Post-Closure Summary Reports will better help assess this CAMU in the future.

Annual Post-Closure Care Summary Report CAMU Inspection and Maintenance Summary

Due to some of the issues with maintenance of leachate collection system and keep the records, the facility will be required to submit an annual post-closure care summary report under "Inspection Section" in Section II.

Condition II.D.6.

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

Leachate Collection System in CAMU

Log No. B-167R-M-12, Condition II.C.6, e, f, g, required that:

e. The leachate collection and removal system for the CAMU shall 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 1 foot (30 cm).

f. The leachate collection system pumps for the CAMU shall be operated and maintained such that they automatically turn on if leachate in the Phase 1 or Phase 2 sumps reaches an elevation of 757.0 feet as indicated on Drawing 11 in the approved permit application.

g. The leachate collection system for the CAMU shall be operated and maintained such that the leachate pump alarms in Phase 1 and Phase 2 of the CAMU are activated if the leachate in either of the sumps reaches an elevation of 758.0 feet.

The former Condition II.C.6 e is consistent with the requirement of 35 IAC 724.401(c)(2) that no more than 30 cm (1 foot) of leachate can be accumulated. However, the requirement in Item (f)above at "Elevation 757 feet" is referring to 2.5 feet above the bottom of the liner (i.e. bottom of the liner is at Elevation 754.5 feet) in accordance with Figure 11R in Attachment C of the application. In Figure 11R and accordance with (g) above, the alarm does not go off until at Elevation 758 feet, which is 3.5 feet above the bottom of the liner.

This inconsistence will be resolved by removing the languages in (f) and (g) in Monitoring, Maintenance, and Recordkeeping Section. However, to allow for the facility to properly address this issue and make modifications to the current system to meet the 30 cm (1 foot) requirement, a special condition will be added to allow for a submission of a plan to modify the current system to meet the regulatory requirements.

Financial Assurance for Post Closure Care:

30- year post closure care cost for Financial assurance is required in Section II., and Special condition was added to update the current cost estimate (which was provided in 2019 for 12 years of post closure).

Corrective Action for Indoor Inhalation

This site has never been evaluated for indoor inhalation risks at any of the former SWMUs/HWMUs/AOCs for any contamination remaining or potentially remaining at the site. Section IV, Condition IV.D requires the facility to evaluate indoor inhalation exposure route and a special condition requires a workplan to be submitted in 180 days as a corrective action submittal along with a cost estimate for the proposed activities.

Other Deficiencies in Approved Permit Applications to be submitted

Following technical documentations were still needed to be provided as addendum to the approved application.

1. The facility must submit to Illinois EPA 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.2.2 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. This plan must be submitted in accordance with 35 IAC 724.153. (*Appendix K of 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 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.

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;

ii. The pump alarm triggers after an additional one-foot (30 cm) leachate has accumulated from the pump activation point; and

iii. Any relevant engineering prints are provided as part of this plan with updates reflecting proposed changes to any previous prints.

2. Within 180 days of the effective date of this Permit, the Permittee must submit to Illinois EPA, 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.

Any additional conditions as required by the GW Reviewer will be incorporated to the permit.

Attachment A

Discussion of Post Closure Care Cost Estimate for Closed RCRA Landfill Disposal Units with Hazardous Wastes In-Place, Including Corrective Action Management Units, undergoing RCRA Post-Closure Care

I. RCRA Regulations for Finical Obligations for Post-Closure Care

1. Applicable Regulations

The following regulations address the post-closure period, and the requirement to establish financial assurancc during the post-closure care period.

- 35 IAC 724.240 (b) states that the requirements for Sections 724.244 and 724.245 apply to: disposal facilities and units closed with landfill requirements.

  - 724.244(a) states the post-closure cost estimate is required in current dollars for post-closure monitoring and maintenance of the facility in accordance with Sections 724.217 through 724.220, 724.328, 724.358, 724.380, 724.410, and 724.703.

  - 724.244 (a)(2) The post-closure cost estimate is calculated by multiplying the annual post-closure cost estimate by the number of years of post-closure care required under Section 724.217.

- 724.244(b) requires the post-closure cost estimate be adjusted annually for inflation within 60-day prior to the anniversary date of the establishment of the financial assurance used to comply with Section 724.245.

- 724.245 requires an owner or operator of a hazardous waste management unit subject to the requirements of Section 724.244 must establish financial assurance for post-closure care in accordance with the approved post-closure plan for the facility.

- 35 IAC 724.217(a)(1) and (2) specifies the post-closure care period must begin after completion of closure and continue for 30 years after completion of closure unless a permit is modified to shorten or extend the post-closure care period.

- Other Considerations for Financial Obligation Related to RCRA Post-Closure Care

- As required in 35 IAC 724.245, the financial assurance must be established in accordance with the approved post-closure care plan for the post-closure care period of 30 years as required under Section 724.217 (a)(1), unless a permit modification allowing a revised post-closure care period has been approved.

- USEPA's December 15, 2016 document, "Guidance for Evaluating the Post-Closure Care Period for Hazardous Waste Disposal Facilities under Subtitle C of RCRA" (2016 USEPA Guidance) also indicates that the owner or operator is required to establish financial assurance for post-closure care in an amount equal to the current post-closure

cost estimate and that an adjusted post-closure care period may also necessitate revisions to the associated post-closure cost estimate and financial assurance.

- Historically, during the post-closure care period, the facility's financial assurance liability has been allowed to be reduced by prorating with a number of years completed to minimum of 10 years. However, this prorated-reduction or the minimum of 10-year did not take into consideration the financial risk to the Illinois EPA and citizens of Illinois, if the Illinois EPA would have to unexpectedly assume operation of the post-closure care at the facility. The Illinois EPA has evaluated the requirements for post-closure care, cost estimates, and financial assurance for the hazardous waste management unit(s) under 35 IAC Part 724, and has determined that financial assurance equivalent to the rolling 30-year post-closure care cost estimate is minimally necessary to address such financial risks to the State if any hazardous waste is left in place at the unit. If any evidence shows that the estimated cost should be higher than the 30-year cost, then it should be adjusted to a higher number of years.

- As required by 35 IAC 724.217(a) (1), a 30-year post closure care cost is required for establishing financial assurance. Any adjustment to this 30-year requirement must be made through a permit modification.

- At the Illinois EPA, any revisions and adjustments to the post-closure care cost estimates and associated finical assurance requirements have been and will be made under Class 1* permit modifications, unless they are made through a permit renewal or with other modifications requiring Class 2 or 3 modifications (such as extending the post-closure care period).

II. Extension of Post-Closure Care Period Beyond Initial 30 Years

This section provides the rational and reasoning for evaluating a need to extend the post-closure care period beyond the initial 30 years for RCRA hazardous waste landfills undergoing post-closure care as required under 35 IAC Part 724.

1. Applicable Regulations, Statue, and Guidance

The Illinois EPA's evaluation to determine whether it is necessary to continue post-closure care and to extend post-closure care for a RCRA landfill is based on the following applicable regulations and reference materials:

a. The following sections of 35 IAC Part 724: 724.131, 724.210 through 724.220, 724.410.

b. 35 IAC 703.241(a)(2) and 35 IAC 703, Appendix A, E.2;

c. Sections 12(a), 21(n) and 39(g) of the Environmental Protection Act (Act);

d. USEPA's Guideline for Evaluating Post-Closure Care Period, dated December 15, 2016; and

e. ASTSWMO Position Paper, dated July 20. 2022 "Post-Closure Care Beyond 30 Years at RCRA Subtitle C Facilities"; and

2. Post-Closure Care Requirements under 35 IAC Part 724

Below is a list of RCRA regulations under 35 IAC Parts 702, 703, and 724 applicable in evaluation and, when necessary, modifying the permit to extend the post-closure care period beyond the initial 30-year post-closure care requirement at each facility:

Maintenance of Facility under 35 IAC 724.131
In accordance with Section 724.131, facilities must be designed, constructed, maintained and operated to minimize the possibility of any release of hazardous waste or hazardous waste constituents to air, soil, or surface water that *could* threaten human health or the environment.

Post-Closure Care Period under 35 IAC 724.217 (a)(1)
In accordance with Section 724.217 (Post-Closure Care and Use of Property), under Subsection 724.217(a)(1), post-closure of a hazardous waste management unit must begin after completion of closure of the unit and continue for 30 years after that date.

Post-Closure Use of Property 35 IAC 724.217 (c)(1) and (c)(2)
Subsection 35 IAC 724.217(c)(1) and (c)(2) prohibits any disturbance of the integrity of the final cover, liner, or any other components of the containment system or the function of the monitoring system unless it is necessary to protect and reduce the threat to human health and the environment.

For Modern Plating CAMU, as it was approved prior to April 22, 2002, requirements in 35 IAC 724.651 applies, which also indicates that the closure standards in Section 724.213 are applicable. Furthermore, 35 IAC 724.651.(b)(2) specified that Subparts F, G, H and any Unit specific requirements under 35 IAC Part 725requirments apply. 35 IAC 724.651(e)(4)(d) under closure and post-closure care requirements requires that : "Post-closure care requirements as necessary to adequately protect human health and the environment, including, for areas where wastes will remain in place, monitoring and maintenance activities and the frequency with which such activities must be performed to ensure the integrity of any cap, final cover, or other containment system." Furthermore, 35 IAC 724.651(e)(4)(h) indicates that " The designation of a CAMU does not change the Agency's existing authority to address cleanup levels, media-specific points of compliance to be applied to remediation at a facility, or other remedy selection decisions."

Extending the Post-Closure Care Period under Section 724.217(b)(2)(B)
Section 724.217(b)(2)(B) allows for extending the post-closure care period when it is necessary to adequately protect human health and the environment (e.g., leachate or groundwater monitoring results indicate a potential for migration of hazardous wastes at levels that may be harmful to human health and the environment). The extension can be done through an adjusted standard issue by the Board pursuant to Section 28.1 of the Act and 35 IAC Parts 101 and 104.

Extending the Post-Closure Care Period under Section 724.218(d) – Amendment of Plan
In the case that Amendment of Plan for Post-Closure Care is necessary, the Permittee must submit a written notification of or request for a permit modification to authorize a change in the approved post-closure care plan in accordance with the applicable requirements of 35 IAC Parts

703 and 705. Any modification submitted per request of the Illinois EPA must meet the requirements of 35 IAC Parts 703 and 705.

Land Disposal Unit Specific Requirements for Closure/Post-Closure under Section 724.410
Section 724.410 lists specific closure/post-closure requirements for landfills. Subsection 724.410(a) specifies the minimum standards for construction of the final cover of a landfill at closure, which includes, among other things, long-term minimization of liquid through the closed landfill, function with minimum maintenance, promote drainage and minimize erosion or abrasion of the cover, accommodate settling and subsidence so that the cover's integrity is maintained.

Subsection 724.410 (b) specifies the requirements during post-closure which includes, among other things, requires the facility to maintain the integrity and effectiveness of the final cover and requires the facility to continue operation of the leachate collection and removal system until leachate is no longer detected. It also requires maintaining and monitoring of the Leachate Detection System (LDS) and groundwater monitoring system.

3. Necessary Permit Modification to RCRA Permits under 35 IAC Parts 702 & 703 and the Act

Establishing Necessary Permit Conditions under 35 IAC 703.241(a) (1) & (2)

Section 703.241(a)(1) states that each RCRA permit must include permit conditions necessary to achieve compliance with each of the applicable requirements specified in 35 IAC Part 724. Section 703.241(a)(2) further states that each RCRA permit issued pursuant to Section 39(d) the Act must contain terms and conditions that the Illinois EPA determines are necessary to adequately protect human health and the environment.

Modification of Permit under 35 IAC 703.270
Section 703.270 requires that when the Illinois EPA receives any information including a permit modification request, or conducts a review of the permit file, it can determine if a permit modification or reissuance is necessary. The Illinois EPA must modify or reissue the permit accordingly and may request an updated application if necessary. Permits can be modified if one or more causes for modification listed in Section 703.271 exists.

Causes for Permit Modification under 35 IAC 703.271
The Illinois EPA must modify the permit if the Illinois EPA:

- receives a modification request of the 30-year post-closure period under 35 IAC 724.217(a) (Section 703.271(e)(2));
- must include conditions applicable to units at a facility that were not previously included in the facility's permit (Section 703.271(e)(7)); and
- as necessary to assure that the facility continues to comply with the current applicable requirements under RCRA when the Illinois EPA reviews a land disposal facility under 35 IAC 702.161(d).

5 Year Review of Land Disposal Facility under 35 IAC 702.161(d)

The Illinois EPA must review each RCRA Permit for a land disposal facility no later than 5 years after the date of permit issuance or reassurance and modify the permit as necessary.

Section 39(d) of the Act
It specifies that all RCRA permits must contain terms and conditions, schedules of compliance, which may be required to accomplish the purpose and provisions of the Act.

4. Class of Permit Modification in 35 IAC Part 703

In accordance with 35 IAC Part 703, Appendix A, E.2, extension of post-closure care is classified as a Class 2 Modification request. According to the regulations specified in Sections II.1 through II.3 above, it is appropriate for the Illinois EPA to require the facility to submit a request to extend the post-closure care period by a specified date in a compliance schedule of the RCRA permit. Extending post-closure care is a necessary requirement to meet the terms of 35 IAC Part 724 and the requirements of the Act. A minimum of 180-day prior to the end date of the initial 30-years of post-closure care period is a recommend timeline for a facility to submit a Class 2 Modification to the permit as it involves a public comment period before making the final decision. It is also appropriate for the Illinois EPA to address such matter at the time of a permit renewal (reissuance).

5. Sections 12(a), 21(n), and 39(g) of the Act

The following three sections of the Act apply for the post-closure care of hazardous waste landfills in Illinois:

ACT – 12(a): No person shall: Cause or threaten or allow the discharge of any contaminants into the environment in any State so as to cause or tend to cause water pollution in Illinois, either alone or in combination with matter from other sources, or so as to violate regulations or standards adopted by the Pollution Control Board under this Act.

ACT - 21(n): No person shall: Use any land which has been used as a hazardous waste disposal site except in compliance with conditions imposed by the Agency under subsection (g) of Section 39 of the Act.

ACT - 39(g): The Agency shall include as conditions upon all permits issued for hazardous waste disposal sites such restrictions upon the future use of such sites as are reasonably necessary to protect public health and the environment, including permanent prohibition of the use of such sites for purposes which may create an unreasonable risk of injury to human health or to the environment. After administrative and judicial challenges to such restrictions have been exhausted, the Agency shall file such restrictions of record in the Office of the Recorder of the county in which the hazardous waste disposal site is located.

In accordance with 39(g) and 21(n) of the Act, the Illinois EPA must include land use restrictions for the hazardous waste landfill under post-closure care to protect public health and the environment. The establishment of the land use restrictions is also necessary to meet the conditions of 12(a) of the Act to prohibit discharge of any contaminants into the environment.

6. USEPA Guideline for Evaluating Post-Closure Care Period, dated December 15, 2016

A Guideline for Evaluating Post-Closure Care Period, dated December 15, 2016 was distributed by USEPA. Because many hazardous wastes degrade slowly or do not degrade under containment in these units, the continued presence of hazardous waste in the unit (*i.e.*, any case other than clean closure) indicates the potential for unacceptable impacts on human health and the environment in the future if post-closure care is not maintained. For example, there are often uncertainties in whether controls will continue to function as planned and whether future activities will lead to unplanned exposures to human and environmental receptors. Even if there is no current evidence of actual releases from the facility, significant factors can change over time.

As far as the 30-year post-closure period goes, the regulations' identification of a default 30-year post-closure care period does not reflect a determination by USEPA that 30 years of post-closure care is necessarily sufficient to eliminate potential threats to human health and the environment in all cases. Nor is the full 30-year period always necessary.

The evaluation criteria listed in the guidance document include:

- Nature of waste in the unit. USEPA recommends that current data from regulatory standards be used for comparison to facility-specific performance goals articulated in thc post-closure plan, and that, as necessary, the plan be updated to account for any new information on toxicity and carcinogenicity and understand constituents of concern which may change over time. The timing of the waste deposited in the landfill is also critical as to determine if the wastes had met the treatment requirements of the Land Disposal Restrictions (LDR) in accordance with 35 IAC Part 728 (effective November 1987). If the wastes were placed prior to effective date of LDR regulations, then the treatment standards were not required and likely applied. Furthermore, if the mix of pre-RCRA wastes were managed prior to 1980, then the volume and characteristics of the RCRA wastes in the disposal unit may not represent the actual nature of the contaminates in the unit.

  As CAMU is On-Site Hazardous Waste Management Unit, as all hazardous remediation waste was disposed and being managed. As described in Table F-2 of the Modern Plating application, a total of 21,197 yd^3 of hazardous materials (sludges and contaminated soils) were disposed in the CAMU. These wastes included wastewater heavy metal electroplating sludge, spent cyanide plating bath solution, plating bath residues, spent stripping and cleaning bath solutions, corrosive waste, and heavy metal waste and chlorinated solvents. (F002 and F006)

- Design of the Unit. It is recommended that the permitting authority consider any unit-specific design, in concert with applicable closure and post-closure care requirements, when evaluating whether adjustment of the post-closure care period is warranted to protect against any potential risk on human health and the environment.

- Leachate: Monitoring for leachate generation serves as the most effective way of examining the integrity of the waste management unit.

This CAMU was constructed with a cover, liner, and leachate collection and detection systems as described in Section II of the current and draft permit. However, the leachate levels have been reported to be 0 since Yr2011. Illinois EPA's FOS inspection conducted in 2023 reveled that the leachate collection system were not in working Conditions (based on VN2023-00363). There was no records available that monthly evaluation was conducted to verify that monthly inspections were conducted. Also in 2001, CAMU closure, it was noted that the pump would automatically turn on at the elevation 757.0 while the bottom of the CAMU is at 754.5' (above the first liner) while the leachate is required to be kept at 1' or below in the permit. As no more than 12" of leachate collection at all time is still required, such inspection to indicate the level of leachate monthly is necessary. Also there was no discussion of any leachate detection system being maintenance and being inspected of any leakage levels. At the time of inspection, the pump house was not operatable.

Max Boes of Rockford FOS noted that he noticed that piping from the leachate collection system connected to the had receiver pipe outside of the pumphouse likely not matching to hold the pressure (internal email dated July 25, 2025).

- Landfill Gas Generation. So long as landfill gas continues to be generated, a landfill gas monitoring/management system must remain operational and be maintained.
  The CAMU is equipped with a passive gas venting system. The gas is neither collected nor monitored.

- Groundwater: Groundwater monitoring serves as the primary means of detecting leachate releases and groundwater contamination.

  According to GW Unit reviewer, the same Contaminants of Concern (COCs) presented at the time of closure are present today; cadmium, chromium, lead, nickel, tetrachloroethene, trichloroethene, cis-1,2-dichloroethene, and vinyl chloride. Groundwater management zone (GMZ) is still operated at the site. Groundwater concentrations from the September 2020 sampling event and historical maximum post-closure groundwater concentrations (2004-2020) are presented in Tables C-3 and C-4, respectively. The presumed source area for each plume is the former lagoons. As of the groundwater testing in September 2020, lead exceeded the GQSs in MW-20C and MW-16C, chromium in MW-20C and MW-5D (upgradient), cadmium in MW-9A and MW-22A, and nickel in MW-20C and MW-5D (upgradient). Chlorinated solvents were detected near the former lagoons but in overall lower concentrations, though vinyl chloride exceeds the GQSs in MW-19B and MW-23C. MPC states that many of the historical plumes seem to have dissipated since the September 2020 sampling event, except for cadmium in shallow wells MW-9A and MW-22A, and vinyl chloride in Mw-19B and MW-23C. Figures C-1 through C-4 display the contaminant concentrations of wells throughout the GMZ.

- Siting & Site Hydrogeology: Relevant facility location characteristics (which might have changed since the post-closure plan was approved) may include proximity to vulnerable areas such as residential areas and surface and drinking water sources. The current and reasonably anticipated future land use of the facility and surrounding properties may also

be relevant. Location in potentially vulnerable areas increases the likelihood and potential severity of releases.

Although this site is not located within the 100-year flood-plane zone, which has not be updated in decades, it is located adjacent to and surrounded by wetland areas (as described in Corrective action remediation) and Pecatonica River is within 500 to 600 feet of the CAMU. Immediately to the east and south of the facility boundary are residential areas.

- Facility History: All waste management must be adequately managed to prevent releases of contaminants to the environment. Good compliance records, routine maintenance and inspections, emergency procedures to handle natural disasters, and prompt and efficient response to spills and other incidents, are some of the management practices that help demonstrate whether the unit has been adequately managed.

  As discussed previously, the entire remediation started out as an enforcement. Most recently a VN was issued to the site for not properly managing the CAMU ion 2023.

- Integrity of cover system: A viable cover is the most important mechanism in preventing leachate generation and, ultimately, releases of contaminants.

- Long-Term Care: Establishment and maintenance of physical and legal controls are necessary to prevent unacceptable exposure to hazardous waste or contaminated environmental media left in place.

A long-term stewardship (LTS) is necessary to be established to maintain the physical and legal controls that are necessary to prevent unacceptable exposure to hazardous waste or contaminated environmental media left in place at a site or closed facility. USEPA also recommends that consideration be given as to whether a funding source is available to support any necessary Environmental Covenants (ECs) and Institutional Controls (ICs) in the future.

It is Illinois EPA's determination that as long as hazardous waste is left in place, the risk of future potential for the contamination continues to exist at the hazardous waste landfill. In order to prevent unacceptable exposure to hazardous waste or contaminated environmental media left in place, hazardous waste management units with waste left in place, LTS for all hazardous waste management units is necessary to continue the maintenance of the landfill in perpetuity. Furthermore, as USEPA recommends, the funding for the LTS is necessary to implement the LTS.

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7. ASTSWMO Position Paper, dated July 20. 2022 "Post-Closure Care Beyond 30 Years at RCRA Subtitle C Facilities

The Association of State and Territorial Solid Waste Management Organization (ASTSWMO) Board of Directors prepared and sent a Position Paper, entitled POST-CLOSURE CARE BEYOND 30 YEARS AT RCRA SUBTITLE C FACILITIES, dated July 20, 2022, to the USEPA to recommend that USEPA either revise the RCRA regulations for post-closure or issue supplemental guidance on the implementation of the post-closure regulations under Subtitle C of RCRA. Such guidance should be congruent with the key issues highlighted in the issues section of this position paper. ASTSWMO remains ready to work with EPA to achieve a mutually satisfactory outcome on this very important issue.

This Position paper highlighted the issues that the USEPA guidance needs to be made clear to:

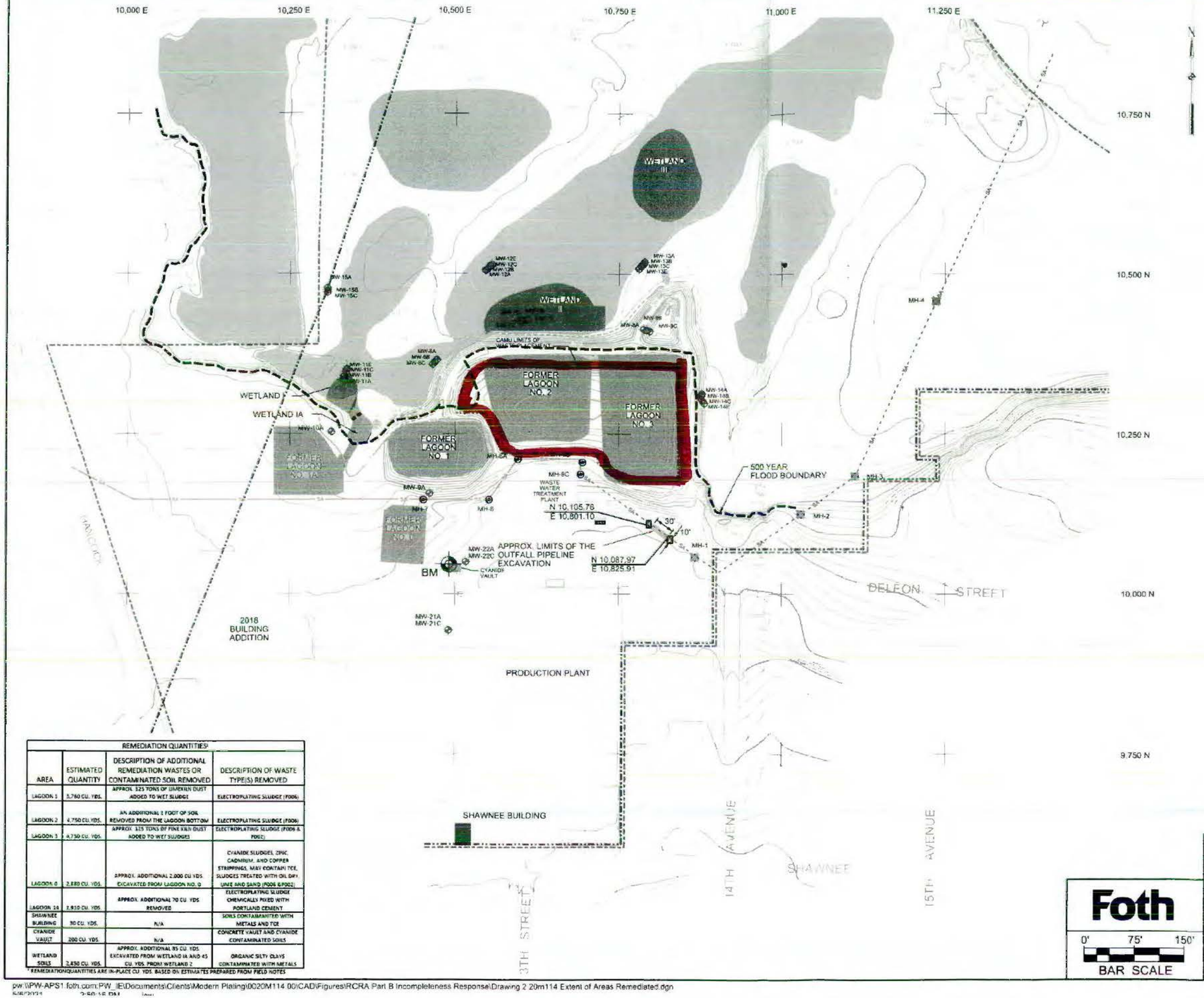
- State that there is a presumption that a Subtitle C post-closure care obligation remains as long as hazardous waste remains in a closed land disposal unit, even if there is no evidence of a release after 30 years of post-closure care;
- Require financial assurance obligation during the extended post-closure care period must be maintained;
- Allow for an alternate enforceable document such as an EC that can be used to control such requirements and restrictions; and
- Provide guidance for monitoring for any new emerging or newly listed wastes.

III. Illinois EPA's Decisions Regarding Extending Post-Closure Care at other IL RCRA Facilities and Communications from Other States

In closing, the Illinois EPA has evaluated and made decisions regarding post-closure care beyond the initial 30-year post-closure period along with maintain 30-yr post closure care cost for financial assurance for the hazardous waste management units closed with waste in place in the last three years that are consistent with the evaluation made for Modern Plating.

Google Maps

Google
Imagery ©2025 Airbus, Maxar Technologies, Map data ©2025 100 ft



LEGEND

- EXISTING BUILDING
- EXISTING GROUND CONTOUR
- EXISTING SPOT ELEVATION
- DEPRESSION
- TREES AND / OR BRUSH
- EXISTING ROADWAY
- EXISTING TRAIL
- MARSH/SWAMP SYMBOL
- WATER BOUNDARY
- EXISTING FENCE
- SA — ACTIVE DISCHARGE SANITARY SEWER PIPELINE
- SA - - - ABANDONED OUTFALL PIPELINE
- GMZ BOUNDARY
- AREA EXCAVATED ' 10' (WIDTH AT EXCAVATION BASE) X 30' (LENGTH) X 7' (DEPTH)
- PIPELINE PLUG NOT IN A MANHOLE
- N 10,087.97 / E 10,825.91 — SPOT LOCATIONS (X, Y)
- AREA EXCAVATED TO REMOVE CHROMATE RINSE WATER CONTAMINATED SOILS
- PIPELINE PLUGGED AND MANHOLE FILLED WITH SOIL
- MANHOLE
- MW-9A — MONITORING WELL NUMBER AND LOCATION
- BM — CONTROL MONUMENT NUMBER AND LOCATION
- BOUNDARY OF 500 YEAR FLOOD
- CAMU LIMITS OF WASTE PLACEMENT
- EXISTING WETLAND AREA
- REMEDIATION AREAS (SEE REMEDIATION QUANTITIES THIS DRAWING)
- APPROXIMATE LOCATION - WETLAND SOIL BORROW AREA

REMEDIATION QUANTITIES*

AREA	ESTIMATED QUANTITY	DESCRIPTION OF ADDITIONAL REMEDIATION WASTES OR CONTAMINATED SOIL REMOVED	DESCRIPTION OF WASTE TYPE(S) REMOVED
LAGOON 1	3,760 CU. YDS.	APPROX. 325 TONS OF LIMESTONE DUST ADDED TO WET SLUDGE	ELECTROPLATING SLUDGE (F006)
LAGOON 2	4,750 CU. YDS.	AN ADDITIONAL 1 FOOT OF SOIL REMOVED FROM THE LAGOON BOTTOM	ELECTROPLATING SLUDGE (F006)
LAGOON 3	4,750 CU. YDS.	APPROX. 325 TONS OF FINE KILN DUST ADDED TO WET SLUDGES	ELECTROPLATING SLUDGE (F006 & F002)
LAGOON 0	2,880 CU. YDS.	APPROX. ADDITIONAL 2,000 CU YDS EXCAVATED FROM LAGOON NO. 0	CYANIDE SLUDGES, ZINC, CADMIUM, AND COPPER STRIPPINGS, MAY CONTAIN TCE, SLUDGES TREATED WITH OIL DRY, LIME AND SAND (F006 &F002)
LAGOON 1A	2,810 CU. YDS.	APPROX. ADDITIONAL 70 CU. YDS REMOVED	ELECTROPLATING SLUDGE CHEMICALLY FIXED WITH PORTLAND CEMENT
SHAWNEE BUILDING	30 CU. YDS.	N/A	SOILS CONTAMINATED WITH METALS AND TCE
CYANIDE VAULT	200 CU. YDS	N/A	CONCRETE VAULT AND CYANIDE CONTAMINATED SOILS
WETLAND SOILS	2,850 CU. YDS.	APPROX. ADDITIONAL 85 CU. YDS. EXCAVATED FROM WETLAND IA AND 45 CU. YDS. FROM WETLAND 2	ORGANIC SILTY CLAYS CONTAMINATED WITH METALS

* REMEDIATIONQUANTITIES ARE IN-PLACE CU. YDS. BASED ON ESTIMATES PREPARED FROM FIELD NOTES

NOTES:

1. SITE LOCATION: SE ¼ OF SECTION 32, T27N, R8E, STEPHENSON COUNTY, ILLINOIS
2. AREA OUTSIDE THE REMEDIATION AREAS IS THE TOPOGRAPHICAL BASE MAP PREPARED BY AERO-METRIC ENGINEERING, SHEBOYGAN, WISCONSIN. DATE OF PHOTOGRAPHY: NOVEMBER 28, 1986. CONTOURS EAST OF THE LAGOONS DERIVED FROM 10 METER DIGITAL ELEVATION MODEL GIS FORMAT. AREA WITHIN THE REMEDIATED AREAS REPRESENT THE POST CLOSURE SURVEY GRADES.
3. ELEVATIONS BASED ON MEAN SEA LEVEL DATUM. CONTOUR INTERVAL IS ONE FOOT. BENCH MARK IS LOCATED ON THE N.W. CORNER OF THE PUMP STATION CONCRETE SLAB, COORDINATES N 10046.1 E 10491.0. AT ELEVATION 773.82 FEET.
4. 500 YEAR FLOOD BOUNDARY TAKEN FROM "NOVEMBER 1976 FLOOD INSURANCE STUDY" BY U.S. DEPARTMENT OF HOUSING & URBAN DEVELOPMENT, FEDERAL INSURANCE ADMINISTRATION.

Foth

0' 75' 150'
BAR SCALE

MODERN PLATING CORPORATION

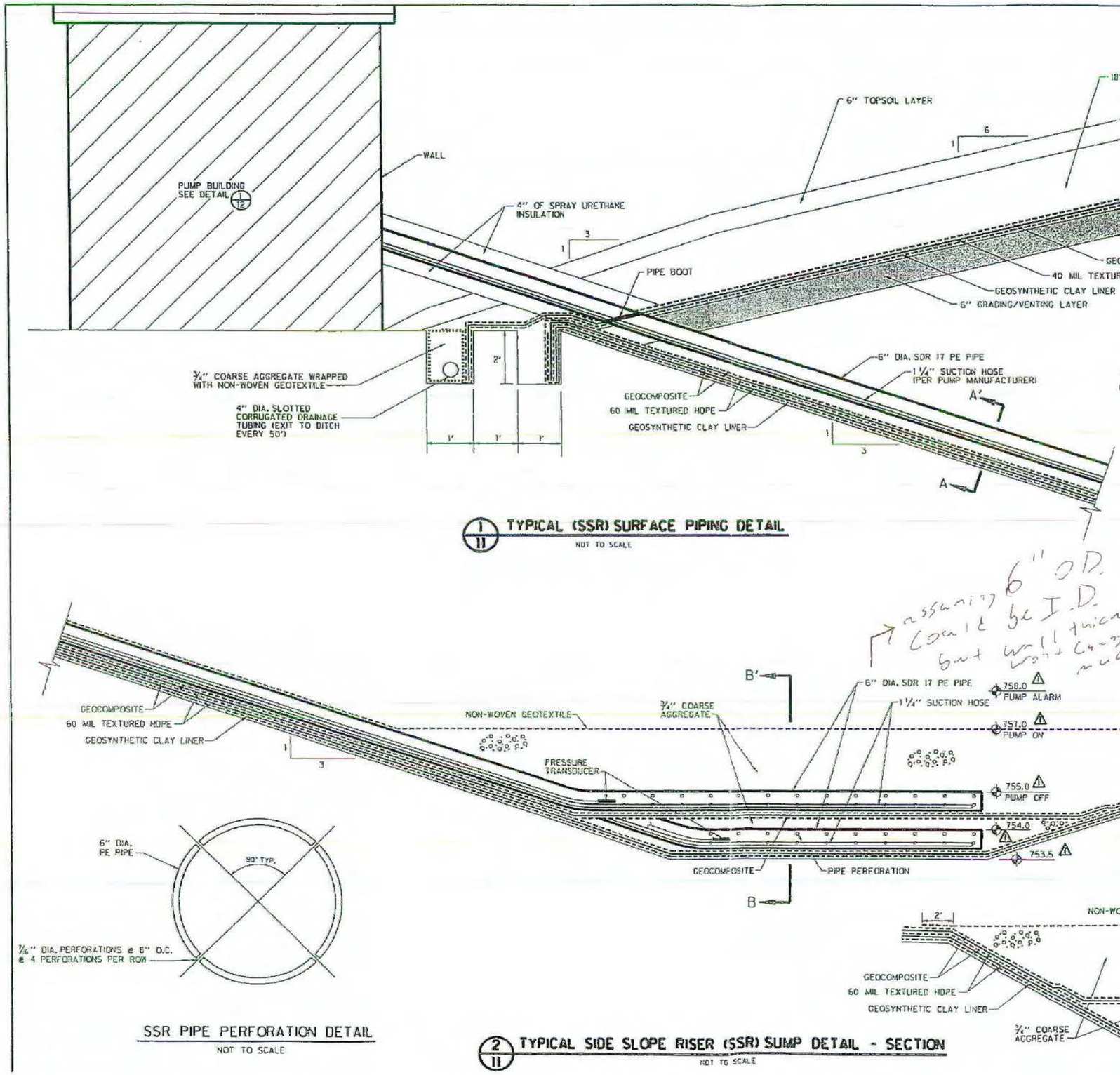
DRAWING NO. 2

EXTENT OF AREAS REMEDIATED

Date: APRIL 2021	Revision Date:	
Drawn By: JOW	Checked By: HLH1	Project: 20M114

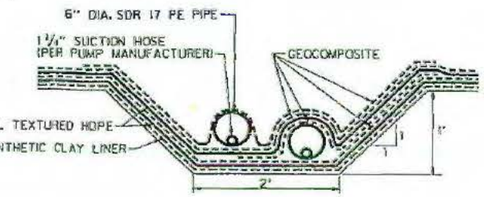
pw:\\PW-APS1.foth.com:PW_IE\Documents\Clients\Modern Plating\0020M114.00\CAD\Figures\RCRA Part B Incompleteness Response\Drawing 2 20m114 Extent of Areas Remediated.dgn
5/6/2021 2:50:15 PM jow

R003206



1/11 TYPICAL (SSR) SURFACE PIPING DETAIL

NOT TO SCALE



SECTION A - A'

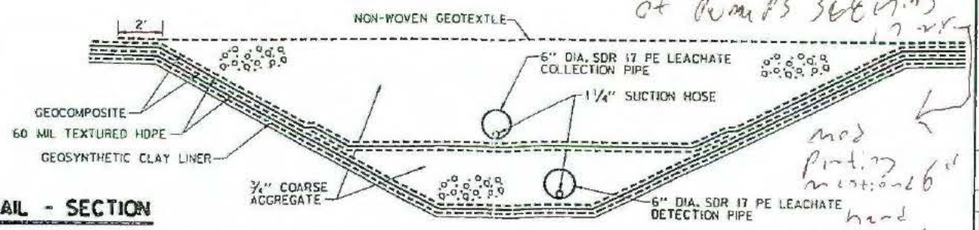
NOT TO SCALE

SSR PIPE PERFORATION DETAIL

NOT TO SCALE

2/11 TYPICAL SIDE SLOPE RISER (SSR) SUMP DETAIL - SECTION

NOT TO SCALE



CADD PROJ CODE: TWIS | PRF NAME:
DRAWN BY: JDW | DATE: MARCH, 1998
SURVEYED BY: N.A. | DATE: N.A.
SURVEY DATA: N.A.

RECORD DRAWINGS OF COMPLETED CONSTRUCTION CONFORMING TO CONTRACTORS AND/OR OWNERS RECORDS.

REVISIONS / REMARKS

NO.	BY	DATE	NO.	BY	DATE
			2	MRS	06/21/99
CORRECTED ELEVATIONS			APPROVED		
			REVIEWED		

Foth & Van Dyke
engineers - architects - scientists

REUSE OF DOCUMENTS
THIS DOCUMENT AND THE IDEAS AND DESIGNS INCORPORATED HEREIN, AS AN INSTRUMENT OF SERVICE, IS PROPRIETARY TO FOTH & VAN DYKE AND ASSOCIATES, UNAUTHORIZED USE OF THIS DOCUMENT FOR ANY PROJECT OTHER THAN THE SPECIFIC APPLICATION AND NOT FOR ORIGINAL USE, PROPOSE IT MAY NOT BE USED WITHOUT THE WRITTEN APPROVAL OF FOTH & VAN DYKE AND ASSOCIATES, UNAUTHORIZED USE SHALL

PLAN OF OPERATION FOR THE CORRECTIVE ACTION MANAGEMENT UNIT AT THE MODERN PLATING CORPORATION FACILITY FREEPORT, ILLINOIS

DETAILS

SCALE: NOT TO SCALE

SCOPE ID: 97M015

DRAWING NO.

O.D. of Pipe

755' - 1/2"

= 754.5 bottom of Comm

754.5 + 1 foot = 755.5 Pump activation

assuming 6" O.D. Could be I.D. but will thickness wall changes this much

755.5+1

= 756.5 for alarm

Suggest to set Pipe for Prevention of Pumps seeing air

Add Piping notation 6" hand required for site visit

ILLINOIS ENVIRONMENTAL PROTECTION AGENCY
1021 North Grand Avenue East, P.O. Box 19276, Springfield, Illinois 62794-9276 • (217) 782-2829
James R. Thompson Center, 100 West Randolph, Suite 11-300, Chicago, IL 60601 • (312) 814-6026
PAT QUINN, GOVERNOR DOUGLAS P. SCOTT, DIRECTOR

217/524-3300

July 22, 2010

Certified Mail
7008 1830 0001 4713 3501

Modern Plating Corporation
Attention: Mr. James R. Stenberg
701 South Hancock Avenue
P.O. Box 838
Freeport, Illinois 61032-0838

Re: 1770200010 -- Stephenson County
Modern Plating Corporation
ILD005172325
Log No. B-167-CA-3
Received: June 15, 2010
RCRA Permit

AUG 25 2010

Dear Mr. Stenberg:

This is in response to the copy of the Environmental Land Use Control (ELUC) filed with the Stephenson County Clerk/Recorder contained in your June 10, 2010 letter to Illinois EPA from the Modern Plating Corporation (MPC) facility in Freeport, Illinois. This submittal was made in an effort to bring remediation of the soils at the following units to completion: Cyanide Treatment Vault, Lagoons 0, 1, 1A, 2, 3 and the Outfall Piping Area. A drawing showing the location of these units within the facility is attached. Modern Plating has completed a substantial amount of investigation and remedial activities to date at these units.

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 recorded with the Stephenson County Clerk/Recorder on June 1, 2010 as Document Number 201000111587. 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 Ill. Adm. Code 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.

1. The filed ELUC places the following restrictions on the subject facility:

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

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

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

d. 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;

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

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

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

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

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

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

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

6. Corrective action activities at the subject facility must continue to be carried out in accordance with: (1) 35 Ill. Admin. Code 724.201; (2) the facility's RCRA permit; and (3) Illinois EPA letters regarding the activities.

7. A completed RCRA Corrective Action Certification must accompany all submittals made to Illinois EPA regarding corrective action efforts at this facility. To allow the submitted information to be adequately reviewed, two copies of the submittal should be provided to Illinois EPA along with the original.

This action shall constitute Illinois EPA's final action on the subject submittal. Within 35 days after the date of mailing of Illinois EPA's final decision, the applicant may petition for a hearing before the Illinois Pollution Control Board to contest the decision of Illinois EPA, however, the 35-day period for petitioning for a hearing may be extended for a period of time not to exceed 90 days by written notice provided to the Board from the applicant and the Illinois EPA within the 35-day initial appeal period.

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

Should you have any questions regarding this matter, please contact Karen Nachtwey at 217-524-3233 of my staff.

Sincerely,

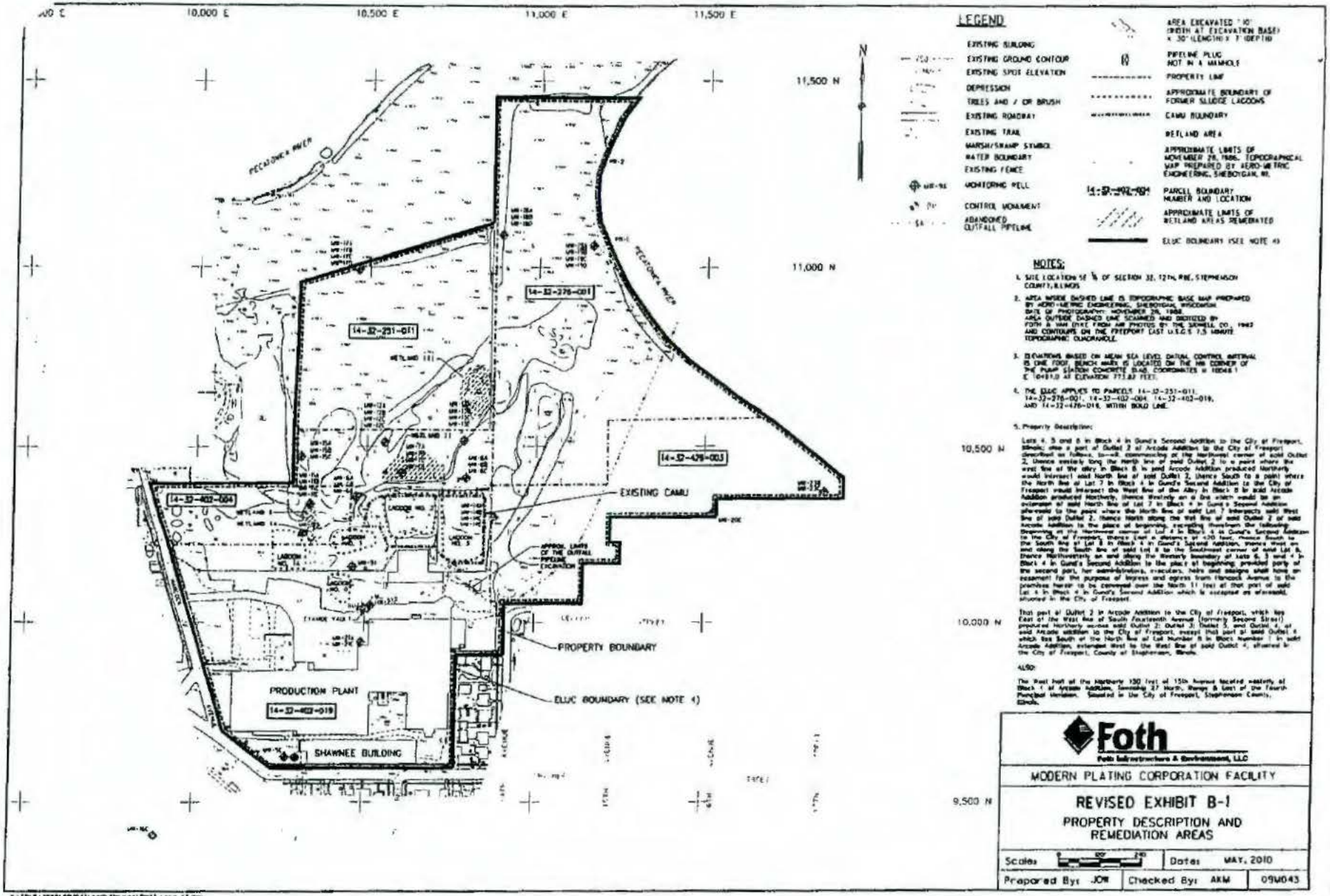
Stephen F. Nightingale, P.E.
Manager, Permit Section
Bureau of Land

SFN:KEN/mls/101763s.doc
JKM

Attachment: Site Layout Map

cc: Foth Infrastructure & Environment, LLC

bcc: **Bureau File**
Rockford Region
Jim Moore
Karen Nachtwey



NOTES:

1. SITE LOCATION SE ¼ OF SECTION 32, T27N, R9E, STEPHENSON COUNTY, ILLINOIS
2. AREA INSIDE DASHED LINE IS TOPOGRAPHIC BASE MAP PREPARED BY AERO-METRIC ENGINEERING, SHEBOYGAN, WISCONSIN DATE OF PHOTOGRAPHY: NOVEMBER 24, 1988. AREA OUTSIDE DASHED LINE SCANNED AND DIGITIZED BY FOTH & VAN DYKE FROM AIR PHOTOS BY THE SANBORN CO., 1982 AND CONTOURS ON THE FREEPORT EAST U.S.G.S. 7.5 MINUTE TOPOGRAPHIC QUADRANGLE.
3. ELEVATIONS BASED ON MEAN SEA LEVEL DATUM. CONTROL BENCHMARK IS ONE FOOT BENCH MARK IS LOCATED ON THE NW CORNER OF THE PUMP STATION CONCRETE SLAB. COORDINATES N 10046.1 E 10491.0 AT ELEVATION 773.87 FEET.
4. THE ELUC APPLIES TO PARCELS 14-32-251-011, 14-32-276-001, 14-32-402-004, 14-32-402-019, AND 14-32-476-018, WITHIN BOLD LINE.
5. Property Description:

Lots 4, 5 and 6 in Block 4 in Gund's Second Addition to the City of Freeport, Illinois; also a part of Outlot 2 of Arcade Addition to the City of Freeport described as follows, to-wit: Commencing at the Northeast corner of said Outlot 2, thence easterly along the north line of said Outlot 2 to a point where the west line of the alley in Block 8 in said Arcade Addition produced Northerly would intersect said North line of said Outlot 2, thence South to a point where the North line of Lot 7 in Block 4 in Gund's Second Addition to the City of Freeport would intersect the West line of the Alley in Block 8 in said Arcade Addition produced Northerly, thence Westerly on a line which would be an extension of said North line of Lot 7 in Block 4 in Gund's Second Addition aforesaid to the point where the North line of said Lot 7 intersects said West line of said Outlot 2, thence North along the west line of said Outlot 2 or said extension thereof to the place of beginning. Excepting therefrom the following Described as the Northeast corner of Lot 4 in Block 4 in Gund's Second Addition to the City of Freeport, thence East a distance of 430 feet, thence South to the South line of Lot 3 in Block 4 in Gund's Second Addition, thence West on and along the South line of said Lot 3 to the Southwest corner of said Lot 3, thence Northwesterly on and along the Westerly boundary of Lots 3, 2 and 1 in Block 4 in Gund's Second Addition to the place of beginning, provided party of the second part, her administrators, executors, heirs and assigns shall have an easement for the purpose of ingress and egress from Hancock Avenue to the premises to be conveyed over the North 11 feet of that part of said Lot 4 in Block 4 in Gund's Second Addition which is excepted as aforesaid, situated in the City of Freeport.

That part of Outlot 2 in Arcade Addition to the City of Freeport, which lies East of the West line of South Fourteenth Avenue (formerly Second Street) produced Northerly across said Outlot 2; Outlot 3; Outlot 5, and Outlot 6, all said Arcade addition to the City of Freeport, except that part of said Outlot 6 which lies South of the North line of Lot Number 8 in Block Number 1 in said Arcade Addition, extended West to the West line of said Outlot 6, situated in the City of Freeport, County of Stephenson, Illinois.

ALSO:

The West half of the Northerly 150 feet of 15th Avenue located easterly of Block 1 of Arcade Addition, Township 27 North, Range 8 East of the Fourth Principal Meridian. Situated in the City of Freeport, Stephenson County, Illinois.

Foth
Foth Infrastructure & Environment, LLC

MODERN PLATING CORPORATION FACILITY

REVISED EXHIBIT B-1
PROPERTY DESCRIPTION AND REMEDIATION AREAS

Scales	Dates	MAY, 2010	
Prepared By: JCW	Checked By: AKM		09W043

X:\CAD\E \2009\09W043\Graphics\Figure 4\Figure 4.dgn
5/17/2010 DR

R003210

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		what is "checking"? *
		Check for leaks weekly thereafter.	5 days after start-up, repair leaks within 15 days.		
		Service pumps.	Per manufacturer's O&M manual.		Minimum checking frequency to maintain pump. *
		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.		When is cleaning/piping? *
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.		→ Mon. frequency Req'd.
		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 die-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.	← Not included on B-1		
		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

Modern Plating Corporation

Daily CAMU Pumping

Year	Time Period	Total
2003	1-1-03 through 12-31-03	17194
2004	1-1-04 through 12-31-04	10326
2005	1-1-05 through 12-31-05	11687
2006	1-1-06 through 12-31-06	4955
2007	9-1-06 through 8-31-07	5370
2008	9-1-07 through 8-31-08	10879
2009	9-1-08 through 8-31-09	6546
2010	9-1-09 through 8-31-10	1957
2011	9-1-10 through 8-31-11	0
2012	9-1-11 through 8-31-12	0
2013	9-1-12 through 8-31-13	0
2014	9-1-13 through 8-31-14	0
2015	9-1-14 through 8-31-15	0
2016	9-1-15 through 8-31-16	0
2017	9-1-16 through 6-30-17	0
2018	9-1-17 through 6-30-18	0
2019	9-1-18 through 6-30-19	0
2020	7-1-19 through 6-30-20	0
2021	7-1-20 through 6-30-21	0
2022	7-1-21 through 6-30-22	0
2023	7-1-22 through 6-30-23	0
2024	7-1-23 through 6-30-24	2000
2025	7-1-24 through 6-30-25	18265

Prior 3-year average (2023 through 2025): **6755**

Taken from RCRA Permit Modification Request dated 7/22/25 (Received 7/31/25)

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 MMB

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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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 thcir 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.

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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.	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.	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.		

1770200010 – Modern Plating Corporation
Log No. B-167R2
Page A-1 of A-6

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 die-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 seeking 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)	Modern 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

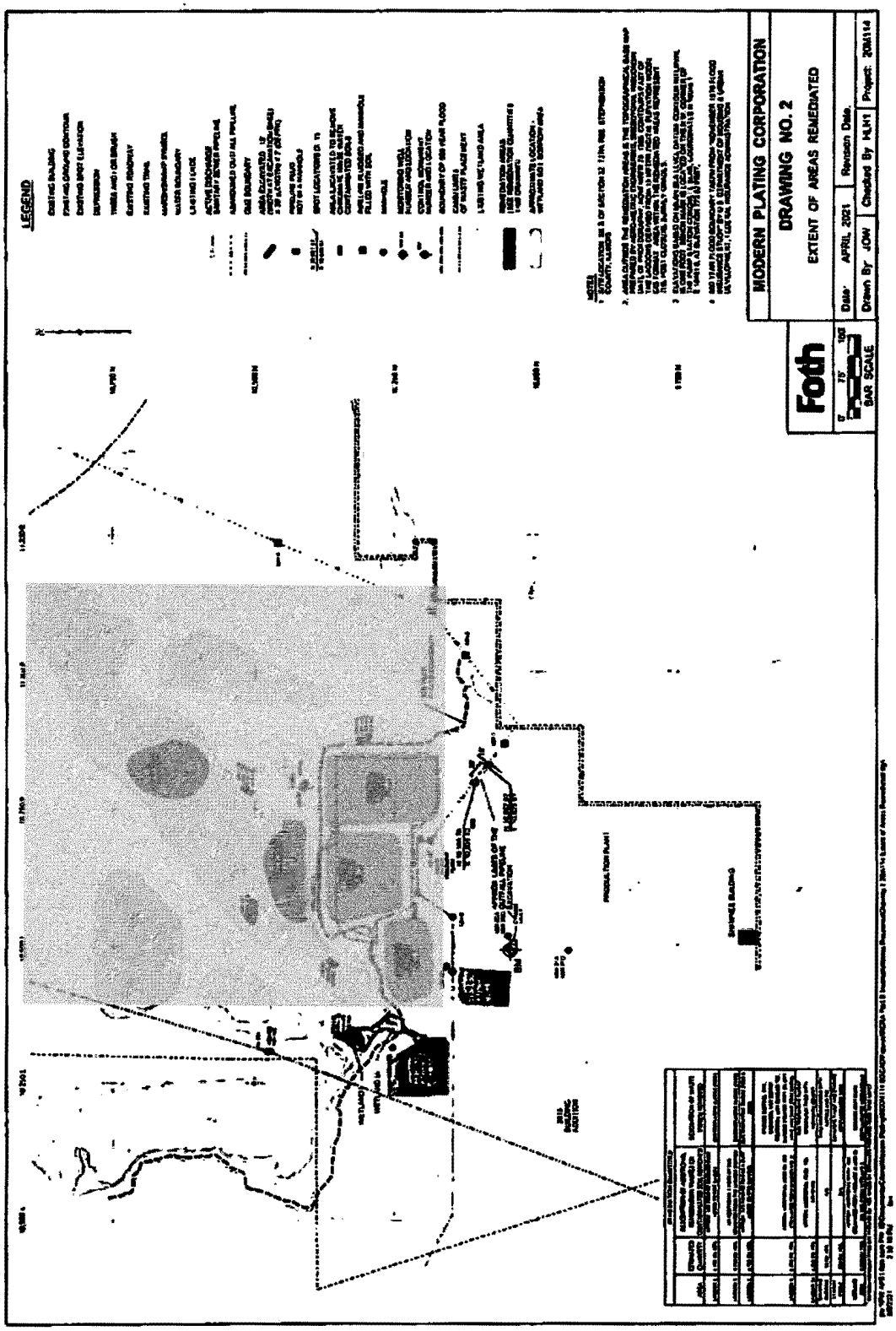
FACILITY MAPS

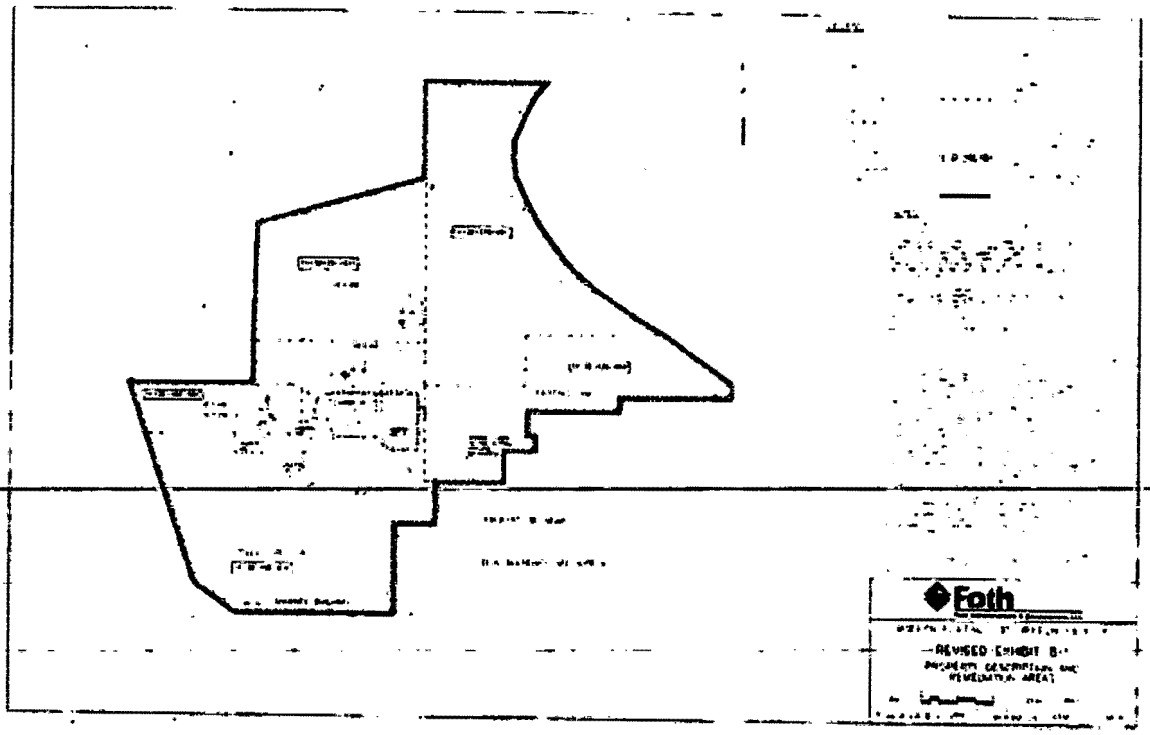
STATE ID # 1770200010

ILD005172325

Post-Closure Permit Log No. B-167R2

1770200010 – Modern Plating Corporation
Log No. B-167R2
Page E-1 of E-2

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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

Telephone Call Log by Takako Halteman:
Date: September 9, 2025 (3:19 pm for approximately 1-hr)
RE: 1770200010 – Modern Plating
Log No. B-167R2 – Draft Permit

I have spoken with Heather Hallett, PG, CPG on behalf of Modern Plating;

Heather Hallett, PG, CPG
Foth Infrastructure & Environment, LLC
2121 Innovation Court, Suite 100
P.O. Box 5095
De Pere, WI 54115-5095
Ph: (920) 497-2500
Direct: (920) 496-6912 / Cell (505) 205-3353
www.foth.com

Ms. Hallett sent me email dated 9/4/2025 asking for clarification of the following conditions in Section V of the draft permit for the site. As I was on vacation then, I returned call today. In preparation for the call, I checked with Sara Brubaker of Community Relations to ensure, answering questions below are appropriate without considering them as public comment and she agreed that it was okay.

Before I stated the call discussion, I made sure that the caller didn't provide the public comments the draft permit; rather she was only requesting clarification. She said these were only questions for clarification and that these were not to be considered public comments to the draft permit:

Draft Permit Section V

- 39i Certification- Brandon Smith, the operator, filled out this form and it was sent to IEPA by mail and emailed to you on July 29, 2025. Was there a problem with the form? Is there more information needed?

TNH Response: *There was an additional copy, which listed Brandon Smith. As a follow-up to call, email was sent that it was an error, and this condition will be removed. I have emailed back to her after the call that this condition will be removed from Section V.*

- 1. Is there a form we need to submit for a Class I permit modification request?

TNH Response: *39i and LPC PA-23 Form.*

- 1.a. We submitted a revised RCRA Part A application to Collier Sanders on 5/30 by email and mail. Is there a problem with the information we submitted?

TNH Response: *We looked at Attachment 3. Generator ID section was updated; however, Part B from (second portion) was not updated to include any HW generated on-*

- B.1.b. The RCRA Part B permit renewal application included two drawings showing the location of all of the site features, including the CAMU, monitoring wells, roads, etc. Are there details missing from these drawings? I assume you want us to resubmit these figures with additional details added? Any specific comments you can give us would help us make sure you get what you need.

TNH Response: *We are looking for details on the current facility operation as well as better detailed map to identify the actual conditions/boundary with operation of CAMU. B.1.c details the types of information being requested here.*

- B.1.h. I need some guidance about what all needs to be included in the financial assurance for post-closure care of the CAMU and where the $413,858 amount came from. The financial assurance is for the period of 2025-2030, correct? Closure date was 2000.

TNH Response: *The Agency evaluated of the financial risk of managing the hazardous waste post-closure facilities in recent years (i.e. if a site goes in bankruptcy, what are the financial risks for the State to take over the post-closure of the facility in a long term. Based on 35 IAC 724.217 and Subpart H, we are requiring all RCRA Post-Closure facilities to maintain 30-years cost estimate for post-closure at all time, regardless of the years of post-closure carte completed. I have informed the caller that we are requiring the same 30-year FA for all RCRA post-closure sites in Illinois and it is an Agency policy.*

Attachment: Hallett Email top Halteman, dated 9/4/2025

Call Log 9/9/2025
1770200010 – Modern Plating
Page 3

Attachment: Email dated 9/4/2025

From: Hallett, Heather L <Heather.Hallett@foth.com>
Sent: Thursday, September 4, 2025 8:29 PM
To: Halteman, Takako <Takako.Halteman@Illinois.gov>
Subject: [External] Questions on Modern Plating Draft Renewed RCRA Haz Waste Management Post-Closure Permit

Takako,
I have some questions about the Draft Renewed RCRA Haz Waste Management Post-Closure Permit received by Modern Plating, dated Aug 5, 2025. I work for Foth, their environmental consultant, we prepared the RCRA renewal application.
My questions are in reference to Section V Special Conditions:

A. 39i Certification- Brandon Smith, the operator, filled out this form and it was sent to IEPA by mail and emailed to you on July 29, 2025. Was there a problem with the form? Is there more information needed?
B. 1. Is there a form we need to submit for a Class I permit modification request?
B.1.a. We submitted a revised RCRA Part A application to Collier Sanders on 5/30 by email and mail. Is there a problem with the information we submitted?
B.1.b. The RCRA Part B permit renewal application included two drawings showing the location of all of the site features, including the CAMU, monitoring wells, roads, etc. Are there details missing from these drawings? I assume you want us to resubmit these figures with additional details added? Any specific comments you can give us would help us make sure you get what you need.
B.1.h. I need some guidance about what all needs to be included in the financial assurance for post-closure care of the CAMU and where the $413,858 amount came from. The financial assurance is for the period of 2025-2030, correct? Closure date was 2000.

Feel free to call if it's easier to discuss.
Heather

Heather Hallett, PG, CPG
(she/her/hers)
Lead Hydrogeologist
Licensed in WI, IL and PA

Foth

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BOL Permit Section RCRA Tracking Sheet

BOLSiteCode ***1770200010*** *Federal ID(s)* ***ILD005172325*** *Respond by:* ***10/15/2025***

Site: ***Modern Plating Corp*** *Region:* ***Rockford***

City: Freeport *County:* Stephenson

Data Regarding Logged Submittal(s) per Log # ***B-167R2***

Review Status	PermitClass	AppType	Reviewers: RCRA, CAU, DAU, RCRA GAU			
Active	Renewal Part B Pmt	RCRA Part B	COS			AF

DocTitle_Description	Submittal Type	Review Type	Agency Response
39(i) form	Additional Info	Technical	Draft Permit

Date Received 07/31/2025 Date Due 10/29/2025 Date Mailed 08/05/2025

Submittal Comment:

LPC-PA23 permit application form for renewal, RCRA Subtitle C site ID form, and fire inspection report	1st Submittal	Technical	

Date Received 06/05/2025 Date Due 09/03/2025 Date Mailed

Submittal Comment:

Response to NOD	Resp-Technical NOD	Technical	

Date Received 05/11/2021 Date Due 08/09/2021 Date Mailed

Submittal Comment:

Renewal Part B Permit application	1st Submittal	Technical	Technical NOD

Date Received 01/08/2021 Date Due 04/08/2021 Date Mailed 03/05/2021

Submittal Comment:

BOLSiteCode ***1770200010*** *Federal ID(s)* ***ILD005172325*** *Respond by:* ***10/15/2025***

Site: ***Modern Plating Corp*** *Region:* ***Rockford***

City: Freeport *County:* Stephenson

Data Regarding Logged Submittal(s) per Log # ***B-167R2***

Final Action Data

For Log No: B-167R2

Units Addressed	Final Action Status	Date FA Issued	Date NFA	Date Closure Cert Accepted	Acres Remediated
					0

Closure Type:	Institutional Control	Clean Closed:	1 Institutional Control:	2 Institutional Control:
	☐			

BOL Permit Section RCRA Tracking Sheet

BOLSiteCode ***1770200010*** *Federal ID(s)* ***ILD005172325*** *Respond by:* ***8/30/2025***

Site: ***Modern Plating Corp*** *Region:* ***Rockford***

City: Freeport *County:* Stephenson

Data Regarding Logged Submittal(s) per Log # ***B-167R2***

Review Status	PermitClass	AppType	Reviewers: RCRA, CAU, DAU, RCRA GAU			
Active	Renewal Part B Pmt	RCRA Part B	COS			AF

DocTitle_Description	Submittal Type	Review Type	Agency Response
39(i) form	Additional Info	Technical	A/P

Date Received 07/31/2025 Date Due 10/29/2025 Date Mailed

Submittal Comment:

LPC-PA23 permit application form for renewal, RCRA Subtitle C site ID form, and fire inspection report	1st Submittal	Technical	

Date Received 06/05/2025 Date Due 09/03/2025 Date Mailed

Submittal Comment:

Response to NOD	Resp-Technical NOD	Technical	

Date Received 05/11/2021 Date Due 08/09/2021 Date Mailed

Submittal Comment:

Renewal Part B Permit application	1st Submittal	Technical	Technical NOD

Date Received 01/08/2021 Date Due 04/08/2021 Date Mailed 03/05/2021

Submittal Comment:

BOLSiteCode ***1770200010*** *Federal ID(s)* ***ILD005172325*** *Respond by:* ***8/30/2025***

Site: ***Modern Plating Corp*** *Region:* ***Rockford***

City: Freeport *County:* Stephenson

Data Regarding Logged Submittal(s) per Log # ***B-167R2***

Final Action Data

For Log No: B-167R2

Units Addressed	Final Action Status	Date FA Issued	Date NFA	Date Closure Cert Accepted	Acres Remediated
					0

Closure Type:	Institutional Control	Clean Closed:	1 Institutional Control:	2 Institutional Control:
	☐			

BOL Permit Section RCRA Tracking Sheet

BOLSiteCode ***1770200010*** *FedID:* ***ILD005172325*** *Respond by:* ***6/10/2021***

Site: ***Modern Plating Corp*** *Region:* ***Rockford***

City: Freeport *County:* Stephenson

Facility Permit Universe: ☐ **OperatingUniverse** ☑ **PostClosureUniverse** ☑ **CorrActionUniverse** ☐ **UIC**

Facility Type: ***Right-to-Know Status:*** ***RTK Status Change Date:***

Site Comments:

Data Regarding Log #: *B-167R2*

Review Status	PermitClass	AppType	Reviewers: RCRA	CAU	DAU	GU
Active	Renewal Part B Pmt	RCRA Part B	MLG			PMS

LogComments:

Submittals for Log

DocTitle_Description	Submittal Type	Review Type	Agency Response
Response to NOD	Resp-Technical NOD	Technical	DRAFT

Submittal Received: 05/11/2021 **Date Due:** 08/09/2021 **Pub Notice/Date Mailed:**

Submittal Comments:

Renewal Part B Permit application	1st Submittal	Technical	Technical NOD

Submittal Received: 01/08/2021 **Date Due:** 04/08/2021 **Pub Notice/Date Mailed:** 03/05/2021

Submittal Comments:

Final Action Data

For Log No: **B-167R2**

Units Addressed	Final Action Status	Date FA Issued	Date NFA	Date Closure Cert Accepted	Acres Remediated
					0

Closure Type:	Institutional Control	Clean Closed:	1 Institutional Control:	2 Institutional Control:
	☐			

BOL Permit Section RCRA Tracking Sheet

BOLSiteCode ***1770200010*** *FedID:* ***ILD005172325*** *Respond by:* ***2/19/2021***

Site: ***Modern Plating Corp*** *Region:* ***Rockford***

City: Freeport *County:* Stephenson

Facility Permit Universe: ☐ **OperatingUniverse** ☑ **PostClosureUniverse** ☑ **CorrActionUniverse** ☐ **UIC**

Facility Type: ***Right-to-Know Status:*** ***RTK Status Change Date:***

Site Comments:

Data Regarding Log #: *B-167R2*

Review Status	PermitClass	AppType	Reviewers: RCRA	CAU	DAU	GU
Active	Renewal Part B Pmt	RCRA Part B	MLC			PMS

LogComments:

Submittals for Log

DocTitle_Description	Submittal.Type	Review.Type	Agency Response
Renewal Part B Permit application	1st Submittal	Technical	

Submittal Received: 01/08/2021 **Date Due:** 04/08/2021 **Pub Notice/Date Mailed:**

Submittal Comments:

Final Action Data

For Log No: **B-167R2**

Units Addressed	Final Action Status	Date FA Issued	Date NFA	Date Closure Cert Accepted	Acres Remediated
					0

Closure Type:	Institutional Control	Clean Closed:	1 Institutional Control:	2 Institutional Control:
	☐			

Foth

RECEIVED
SEP 24 2025
Community Relations
Illinois EPA

Foth Infrastructure & Environment, LLC
2121 Innovation Court, Suite 100
P.O. Box 5095
De Pere, WI 54115-5095
foth.com

September 19, 2025

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

Re: Comments on Draft Renewed Resource Conservation and Recovery Act Hazardous Waste Management Post-Closure Permit and Fact Sheet – 1770200010 Stephenson County, Modern Plating Corporation, ILD005172325, Log No. B-167R2.

Dear Sarah Brubaker:

Foth Infrastructure & Environment, LLC is submitting the draft permit comments during the public comment period on behalf of Modern Plating Corporation, the Applicant, in response to the Draft Renewed Resource Conservation and Recovery Act (RCRA) Hazardous Waste Management Post-Closure Permit, issued on August 5, 2025, for the above-referenced facility.

The following table contains the draft permit comments for your consideration:

Draft Summary of Items for Public Comment Letter Draft Renewed RCRA Hazardous Waste Management Post-Closure Permit and Fact Sheet

Section	Issue to be Addressed	Action Item
Fact Sheet		
IIA	Statement says they are a "chrome plating facility", but they are not anymore, they are an "electroplating facility". List of hazardous constituents says "chromium, cyanide, and chlorinated solvents". Cyanide is not a contaminant of concern in groundwater.	The facility currently does electroplating, so this description should say "electroplating" instead of chrome plating. We request that cyanide be removed from the list of hazardous constituents in groundwater.
III. B.1.a	The compliance 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.** In the previous RCRA permit, the standard was **two consecutive years.**	We request that this requirement be corrected to two consecutive years.

Section	Issue to be Addressed	Action Item
Draft Permit		
Draft Permit Section II Post-Closure Care		
C.1		
C.1 and C.2	Corrective Action Activities are ongoing at the site and the 30-yr post-closure period is coming to an end. Post-closure care period of the CAMU must be extended for an additional 30-yr period or until no unacceptable risk to human health and the environment are present.	We object to the extension of the post-closure care period for an additional 30-year period. IEPA's additional requirements are arbitrary and capricious. There is evidence of natural attenuation of groundwater contaminants of concern and few exceedances of groundwater standards in the GMZ wells, so an additional 30-year post-closure care period is not warranted. A 10-year extension is more appropriate. Post-closure care will be revisited when the RCRA Part B permit is due to be renewed.
E.7.d	Leachate collection and removal system should be maintained so that the depth of leachate over the liner in Phase I and II of the CAMU do not exceed 1 foot.	The system is designed to turn on at 18 inches. Lowering it to 1 foot burns out the pump. We request that this requirement be changed to 18 inches.
G.1	Must have financial assurance of at least $413,858 adjusted annually for inflation.	We object to this requirement because IEPA's additional requirements are arbitrary and capricious. This is different from the current structure and is financially burdensome.
G.2	Post-closure care costs are determined by multiplying annual costs by the full 30-yr post-closure period.	We object to this requirement because IEPA's additional requirements are arbitrary and capricious. This is different from the current structure and is financially burdensome.
Draft Permit Section III		
III. D.3	The compliance 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.** In the previous RCRA permit, the standard was **two consecutive years.**	We request that this requirement be corrected to two consecutive years.

Section	Issue to be Addressed	Action Item
III.H.2	Semiannual groundwater sampling is required.	A large amount of historical data is available to establish seasonal fluctuations and trends. Groundwater concentrations have stabilized, and semiannual sampling is no longer required. We request that groundwater sampling frequency be reduced to once every two years.
Section V		
A	39i Certification	IEPA indicated that they received the form, nothing further needed. We ask that this request be removed.
B.2.a	Submit updated survey plat.	There is no need to add additional hazardous waste storage areas or features because Modern Plating does not have additional waste storage, they do not store hazardous waste from electroplating, but instead they transfer it and ship it out regularly. We ask that this request be removed.
B.1.b and c	Identification and descriptions of any hazardous waste management units and solid waste management units at the facility.	There is no need to add additional hazardous waste storage areas or features because Modern Plating does not have additional waste storage, they do not store hazardous waste from electroplating, but instead they transfer it and ship it out regularly. We ask that this request be removed.
B.2.e	A water well survey is needed.	A water well survey was included in the 2021 RCRA Part B Renewal Application. We ask that this request be removed.
B.1.f	Submit most recent documentation for annual cleaning of leachate collection and leak detection systems with high-pressure jetting system.	The lines of the leachate collection system are not designed to be cleaned by high pressure jetting. The PVC may not be strong enough to withstand the pressure. Also, the lines are one-inch PVC and a small enough jetting head is not available to fit.

Section	Issue to be Addressed	Action Item
B.1.g	Submit a workplan to modify the current leachate system such that the leachate depth over the liner does not exceed one foot. Auto activate leachate pump at one foot.	The system is designed to turn on at 18 inches. Lowering it to 1 foot burns out the pump. We request that this requirement be changed to 18 inches.
B.1.h	Submit revised post-closure cost estimate and financial assurance to meeting required minimum of 30 yrs post-closure.	We object to this requirement because IEPA's additional requirements are arbitrary and capricious. This is different from the current structure and is financially burdensome.
B.1.i	Submit proposal to address the continued exceedances.	We addressed this in the Corrective Action Modification Request submitted to IEPA 10-2024. We request to remove this requirement from the final permit.
Attachment H		
Table 1 Sample Parameters	Leachate Sampling Parameter and method list	The PAH method 550 should be updated to 8270 since 550 is for drinking water samples and 8270 is used currently. We request that this be updated in the final permit.

Prepared by: HLH
Checked by: TMK1

Please consider these comments in preparation of the final decision. Please contact Heather Hallett at Heather.Hallett@Foth.com or (920) 496-6912 with any questions.

Sincerely,

Foth Infrastructure & Environment, LLC

Heather L. Hallett, P.G., C.P.G.
Lead Hydrogeologist
Licensed in IL, WI, and PA

Tara M. Van Hoof, P.E.
Lead Environmental Engineer
Licensed in IL and WI

cc: Brandon Smith, Modern Plating
Dave Servatius, Modern Plating

PUBLIC PARTICIPATION CHECKLIST
FOR
RCRA RENEWAL PERMIT
AMINISTRATIVE RECORD

FACILITY: Modern Plating Corp

DATE: September 22, 2025

X	Public Notice
X	Radio paid advertisement and/or payment voucher
X	Cover letters (legislative, concerned citizens, etc.)
X	Repository cover letter
X	Verification that materials were received by repository location
___	Press release or evidence of any other public participation activity
X	Dated mailing list
X	Newspaper tear sheets or affidavit of publications and payment voucher
___	Public hearing transcript or hearing record # (if hearing held)
X	Public comment(s) (Copy of comments or hearing record # where comments may be found)
___	Response summary (if prepared)
___	Final permit issuance or denial notice (if any)

Illinois Environmental Protection Agency

PUBLIC NOTICE OF HAZARDOUS WASTE PERMIT RENEWAL

Modern Plating Corporation in Freeport

The Illinois Environmental Protection Agency (Illinois EPA) hereby gives notice of its intent to approve a renewed Resource Conservation and Recovery Act (RCRA) permit to allow Modern Plating Corporation (MPC) to continue to provide post-closure care for a Corrective Action Management Unit (CAMU). MCP is a chrome plating facility located at 701 South Hancock Avenue in Freeport (Stephenson County), Illinois 61032-0838. Remediation waste generated from the closure and corrective action activities were placed in the CAMU. Closure activities were completed and certified on August 6, 2001, which is also the date that the 30-year post-closure period began for the CAMU.

The interested public is invited to review copies of the renewal permit application, draft renewal permit, and facility fact sheet at the Freeport Public Library, 100 East Douglas Street, Freeport, Illinois 61032.

Written comments on the draft post-closure renewal permit may be submitted during the 45-day comment period. Send comments to the Illinois EPA contact listed below postmarked by 11: 59 PM, September 22, 2025. In response to public requests or at the discretion of the Illinois EPA, a public hearing may be held to clarify technical issues concerning the draft post-closure renewal permit. A public hearing request must be made in writing, express opposition to the draft post-closure renewal permit and state the nature of the issue(s) to be raised during the hearing. Written hearing requests should be sent to the Illinois EPA contact listed below by the end of the comment period. If applicable, public notice of a public hearing will be given at least 30 days in advance of a hearing.

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

Email: Sarah.Brubaker@illinois.gov
Phone: (217) 786-0790
TDD phone number (866) 273-5488

All comments received will become part of the Administrative Record (AR) and will be evaluated by the Illinois EPA in making the final post-closure renewal permit decision. The Illinois EPA will respond to comments on the draft post-closure renewal permit and indicate whether additional documents have been included in the AR. Commenters will be notified of the final post-closure renewal permit decision and the permit decision appeal process.

The AR, including the renewal permit application, draft renewal permit, related information and all data submitted by the applicant, is now available for public inspection. Please call the Illinois EPA contact above for an appointment to view the documents at Illinois EPA office in Springfield. Copies of the draft permit and fact sheet are available at https://epa.illinois.gov/public-notices/bol-permit-public-notice.html.

The facility is located in an area of Environmental Justice concern. More information concerning Environmental Justice may be found at https://epa.illinois.gov/topics/environmental-justice.html.

For further RCRA information, please visit https://www.epa.gov/rcra.

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Business briefs

Continued from Page 2A

Collective.

The Brand House Collective entered into a strategic partnership with the parent company of Bed Bath & Beyond in 2024.

The rebranded store will honor old Bed Bath & Beyond coupons, according to a July 20 news release.

Uber says it is in talks on funding for robotaxi expansion

Uber is in talks with private equity firms and banks to secure funds to build its robotaxi business, CEO Dara Khosrowshahi said, as the ride-hailing giant bets on a mass rollout of the nascent and much-scrutinized technology.

The company has been offering robotaxis from Alphabet-owned Waymo on its ride-hailing app in Austin and Atlanta. It also struck a $300 million partnership in July that will allow it to deploy more than 20,000 vehicles, made by electric vehicle firm Lucid and powered by self-driving tech from Nuro, over six years.

Khosrowshahi on Aug. 6 pitched the tie-ups as part of a larger plan that involves three robotaxi business models: paying partners that own such vehicles a fixed rate; sharing revenue with fleet operators; and owning vehicles while licensing software for self-driving technology.

For now, Uber said it was planning on using a "modest" portion of its around $7 billion in annual cash flows to fund deployments. It might also sell minority stakes in companies to aid the expansion, it said.

Russian consumer price index falls for 3rd straight week

Russia's consumer price index fell by 0.13% in the latest week, the state statistical agency said on Aug. 6, marking a third consecutive week of deflation.

The decrease brought overall price growth this year to 4.37%, compared with 5.27% for the same period last year.

Russia's central bank said earlier on Aug. 6 it expects annual inflation to slow to 8.5% in the third quarter, down from 9.9% in the second quarter.

The central bank, which closely watches the weekly inflation gauge, cut its key rate by 200 basis points to 18% in July.

Sources: EPA could cancel $7B in grants for solar energy

The Trump administration is considering whether to terminate a $7 billion grant program designed to help power low- and moderate-income households with solar energy, two sources briefed on the matter said.

The Environmental Protection Agency could as soon as this week terminate the grants, which were awarded in 2024 during the administration of former President Joe Biden, to 60 nonprofit groups, tribes and states, the sources said. One of sources claimed to have been briefed by a person inside the EPA, and both of them spoke on condition of anonymity.

The EPA's deliberations were first reported by The New York Times.

USA TODAY Network and Reuters

This weekend

Continued from Page 1A

Cost: $35 or $15 for ages 17 and younger; $10 for one-mile fun run

Dinner at the Museum

What: This exclusive event features museum founder and owner, Wayne Lensing. Enjoy a catered dinner surrounded by iconic exhibits and an intimate talk from Wayne himself. He will share stories behind some of his favorite pieces in the collection—ranging from presidential artifacts to the Frontier Land—and reflect on his journey of building one of the most eclectic and fascinating museums in the country. He'll also discuss some of the most significant changes and additions that have shaped Historic Attractions into what it is today. Whether you're a history buff, car enthusiast or simply curious about the museum's evolution, this is a rare opportunity to connect directly with the visionary behind it all. Cash bar.

When: 4 p.m. Saturday, Aug. 9

Where: Historic Attractions, 13825 Metric Drive, Roscoe

Cost: $65; $120 per couple

Winslow Antique Days

What: The event features a variety of activities including a flea market, tractor and antique engine displays with demonstrations, food vendors, adult and kids activities, live music and a pioneer encampment. The Fever River String band performs at 11:30 a.m. Saturday; the No Worries band performs at 11:30 a.m. Sunday in front of the Winslow historical museum. There will also be a pedal tractor pull contest and wagon rides.

The event is described as family-friendly with free admission

When: 7 a.m. – 5 p.m. Saturday, Aug. 9 and Sunday, Aug. 10

Where: Winslow Historical Society and Museum, 606 Bridge St., Winslow

DAV Ride 2025

What: This is an annual fundraising event to help American veterans by having a ride, food, live music, auction and vendors with 100% of the proceeds going to charity. The event includes a motorcycle ride during the day (register at 9:30 a.m., bike blessing at 10:30 a.m., then a group photo and kickstands up at 11 a.m.), silent auction from 9 a.m.-3 p.m.; live auction at 1 p.m., food and raffles all day, a photo booth and pop-up tattoos by Zealous from 4-7 p.m., bingo from noon – 4 p.m. and a street dance with music by Rollin' Whiskey from 5-10:30 p.m.

When: 9:30 a.m. Saturday, Aug. 9

Where: Rock City Tap, 106 N. Main St., Rock City

Goat Hike

What: Enjoy a one-mile hike around the farm and through the woods with miniature goats. There is some uneven surfaces/ground on the trail; sturdy footwear is recommended. There is a farm store where you are welcome to buy farm products (seasonal cheeses, raw honey, goat milk soap, hand salve and more).

When: 9:30-10:30 a.m. Sunday, Aug. 10

Where: Gretta's Goat Farm, 498 Farwell Bridge Road, Pecatonica

Cost: $21; free for children younger than 2 years old when accompanied by parent

Freeport Cruise Night 2025

What: This 47th annual event will feature the classic downtown route that everyone knows and loves. The focus will be on the cars: classics, custom builds, show-stopping trucks and antique rides.

When: 5-9 p.m. Saturday, Aug. 10

Where: 110 W. Main St., Freeport/downtown Freeport

Build Your Own Backpack Bash

What: Hope WINS presents this community event. Kids can build their own backpacks filled with school essentials. There will be a school supply station, games and kid-friendly activities, plus light food and snacks and local community resources from agencies and organizations.

When: 1-5 p.m. Sunday, Aug. 10

Where: Freeport Ford, 555 W. Meadowo, Freeport

Cost: Free

Foreigner Concert

What: With 10 multi-platinum albums and 16 Top 30 hits, Foreigner, founded in 1976, is one of the most popular rock acts in the world. A few hits include "Juke Box Hero," "Cold As Ice," "Hot Blooded," "Waiting For A Girl Like You," "Feels Like The First Time," "Urgent," "Head Games," "Dirty White Boy" and "I Want To Know What Love Is." The Harlem High School Chorale ers will perform a song alongside Foreigner. VIP packages are available.

When: 7:30 p.m. Sunday, Aug. 10

Where: Coronado Performing Arts Center, 314 N. Main St., Rockford

Cost: $78-$1,566

Coming next week

Monday Murders Book Club

What: August is Reader's Choice. There is no chosen book. Each person reads whatever they like and comes to tell the group about it. If it kept you up late or put you to sleep early, we want to hear your honest opinion of your mystery read. Everyone is welcome. There is no registration.

When: 1-2 p.m. Monday, Aug. 11

Where: Freeport Public Library, 100 E. Douglas St., Freeport

Winnebago County Fair

What: Enjoy the sights, sounds, animals, competitions, music, food and beverages, carnival rides and games and great entertainment. Highlights include lumberjack show, diesel truck races, Hob Haven and K-9 demonstrations, Mike & Joe, and Demolition Derbies.

When: 11 a.m. – midnight Wednesday, Aug. 13, 11 a.m. – 11 p.m. Thursday, Aug. 14, 10 a.m. – 12:30 a.m. Friday, Aug. 15, 10 a.m. – midnight Saturday, Aug. 16 and 10 a.m. – 6 p.m. Sunday, Aug. 17

Where: Winnebago County Fairgrounds, 500 W. First St., Pecatonica

Cost: $3-$7; $15 for season pass; $30 for mega pass; $20 for wristband; $80 for pit pass

Music on Debate Square

What: Bring your lawn chairs to the Lincoln-Douglas Debate Square for an evening of music by vanfunk.

When: 6:30 p.m. Thursday, Aug. 14

Where: Debate Square, 114 E. Douglas St., Freeport

Cost: Free

Pour Your Own Epoxy

What: Craft your own epoxy river charcuterie board or lazy susan in this hands-on workshop. The boards feature premium black walnut and other fine hardwoods, accented with epoxy in colors of your choice. You can select up to two epoxy colors when you arrive. After the class, your project sit and fully cure for a week, then undergo a finishing process, which typically takes about six weeks. Once perfected, it will be shipped to you, ensuring your creation arrives in pristine condition.

When: 6-8 p.m. Thursday, Aug. 14

Where: Lena Brewing Co., 9426 W. Wagner Road, Lena

Cost: $139

Kathi Edwards is a freelance contributor to the Kennanee Star-Courier.

Illinois Environmental Protection Agency

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Modern Plating Corporation in Freeport

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Written comments on the draft post-closure renewal permit may be submitted during the 45-day comment period. Send comments to the Illinois EPA contact listed below postmarked by 11: 59 PM, **September 22, 2025.** In response to public requests or at the discretion of the Illinois EPA, a public hearing may be held to clarify technical issues concerning the draft post-closure renewal permit. A public hearing request must be made in writing, express opposition to the draft post-closure renewal permit and state the nature of the issue(s) to be raised during the hearing. Written hearing requests should be sent to the Illinois EPA contact listed below by the end of the comment period. If applicable, public notice of a public hearing will be given at least 20 days in advance of a hearing.

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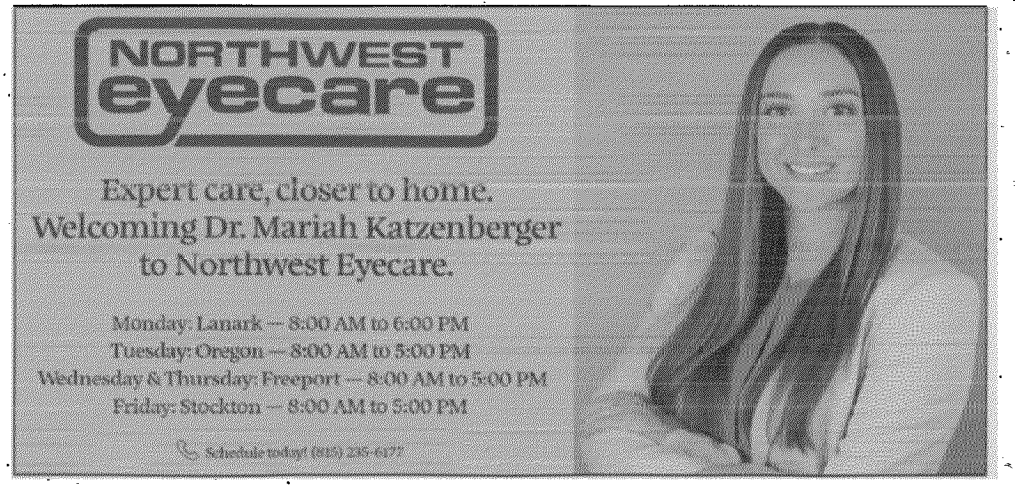
The facility is located in an area of Environmental Justice concern. More information concerning Environmental Justice may be found at https://epa.illinois.gov/topics/environmental-justice.html.

For further RCRA information, please visit https://www.epa.gov/rcra.



Illinois Environmental Protection Agency

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Illinois Environmental Protection Agency
2520 West Iles Avenue, P.O. Box 19276
Springfield, Illinois 62794-9276

Email: Sarah.Brubaker@illinois.gov
Phone: (217) 786-0790
TDD phone number (866) 273-5488

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For further RCRA information, please visit https://www.epa.gov/rcra.

IL 401-0105

July 10, 2025 R003335

AGENCY OFD# EPA-26170

STATE OF ILLINOIS

ORDER FOR DELIVERY

VENDOR

Big Radio
1 Parker Pl, Suite 500
Janesville, WI
Attn: Ben Thompson
ben@bigradio.fm

Ship To
(Transportation Charges To Be Prepaid)

Illinois EPA
2520 West Iles Avenue
Springfield, IL 62704
US

Bill To
IEPA Fiscal Services
(217) 782-3250
Submit invoices to EPA.FiscalServ@illinois.gov

Agency Phone Number: Purchasing (217) 782-1249

Item No.	Description of Article	Qty	U/M	Unit Price	Total Price
	Pursuant to 35 Ill Adm. Code 705.163(b), Resource Conservation and Recovery Act (RCRA) permit, radio advertisements for Modern Plating Corp. This is for a 30-second ad to air once on an English broadcast radio station serving the Freeport listening area. **Radio ad notice - Modern Plating Corp. in Freeport** **:30 Second ad**	1	Ea	$35.00	$35.00 **$35.00**

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

August 5, 2025

Ashley Huffines
Freeport Public Library
100 East Douglas Street
Freeport, Illinois 61032

Dear Ashley Huffines:

Enclosed are the repository documents regarding the Illinois Environmental Protection Agency (Illinois EPA) Resource Conservation and Recovery Act (RCRA) draft renewal permit to allow Modern Plating Corporation (MPC) to continue to provide post-closure care for its chrome plating facility located at 701 South Hancock Avenue in Freeport (Stephenson County), Illinois 61032-0838.

It is important that the public have the opportunity to review the permit application submitted by the company and the draft renewal permit proposed by the Illinois EPA. If citizens have questions regarding this process, please contact Sarah Brubaker, Office of Community Relations, Illinois Environmental Protection Agency, 2520 West Iles Avenue, P.O. Box 19276, Springfield, Illinois 62794-9276, phone (217) 786-0790, TDD phone number (866) 273-5488, sarah.brubaker@illinois.gov. Written comments should be submitted by September 22, 2025. Please include "Modern Plating Corporation" on any comments submitted.

The documents should not be allowed to circulate since interested citizens might then be prevented from reviewing the materials during the 45-day comment period. At the end of the process, you may recycle all of the repository documents or keep the documents for your community archives.

Please complete the attached verification form and return it to me in the enclosed postage-paid envelope. Thank you again for your cooperation in this effort.

Sincerely,

Sarah Brubaker

Sarah Brubaker
Illinois Environmental Protection Agency
Office of Community Relations
(217) 786-0790
sarah.brubaker@illinois.gov

Attachment and Enclosure

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

VERIFICATION OF REPOSITORY RECEIPT

Please fill out this form and return it to Sarah Brubaker in the enclosed envelope or send to sarah.brubaker@illinois.gov.

RECEIVED
AUG 8 2025
Community Relations
Illinois EPA

Repository Location: Freeport Public Library
100 East Douglas Street
Freeport, Illinois 61032

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

Date documents arrived: 08-06-25

Signature of documents recipient:

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Wednesday

8/6/25 at 11:40 AM

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ROCKFORD, IL
8/6/25 8:00 AM

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SHIP DATE 8/5/25

STANDARD TRANSIT 8/6/25

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SERVICE FedEx Ground

TERMS Shipper

Package details

WEIGHT 8.1 lbs / 3.67 kgs

DIMENSIONS 13x13x7 in.

TOTAL PIECES 1

PACKAGING Package

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SORT BY DATE/TIME

Ascending

Time zone

Local Scan Time

FedEx

- 1:24 PM
  Shipment information sent to FedEx

- 3:28 PM
  Picked up
  SPRINGFIELD, IL

- 6:22 PM
  Arrived at FedEx location
  SPRINGFIELD, IL

- 6:23 PM
  Shipment arriving On-Time
  SPRINGFIELD, IL

- 9:21 PM
  Left FedEx origin facility
  SPRINGFIELD, IL

Wednesday, 8/6/25

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  Arrived at FedEx location
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- 4:15 AM
  Departed FedEx location
  CHAMPAIGN, IL

- 8:00 AM
  At local FedEx facility
  ROCKFORD, IL

- 8:05 AM
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Modern Plating Corporation in Freeport
Draft RCRC Post-Closure Renewal Permit
Illinois EPA is accepting public comments until September 22, 2025.

Illinois Environmental Protection Agency
PUBLIC NOTICE OF HAZARDOUS WASTE PERMIT RENEWAL
Modern Plating Corporation in Freeport

The Illinois Environmental Protection Agency (Illinois EPA) hereby gives notice of its intent to approve a renewal Resource Conservation and Recovery Act (RCRA) permit to allow Modern Plating Corporation (MPC) to continue to provide post-closure care for a Corrective Action Management Unit (CAMU). MCP is a chrome plating facility located at 701 South Hancock Avenue in Freeport (Stephenson County), Illinois 61032-0338. Remediation waste generated from the closure and corrective action activities were placed in the CAMU. Closure activities were completed and certified on August 6, 2001, which is also the date that the 30-year post-closure period began for the CAMU.

The interested public is invited to review copies of the renewal permit application, draft renewal permit, and facility fact sheet at the Freeport Public Library, 100 East Douglas Street, Freeport, Illinois 61032.

Written comments on the draft post-closure renewal permit may be submitted during the 45-day comment period. Send comments to the Illinois EPA contact listed below postmarked by 11:59 PM, September 22, 2025. In response to public requests or at the discretion of the Illinois EPA, a public hearing may be held to clarify technical issues concerning the draft post-closure renewal permit. A public hearing request must be made in writing, express opposition to the draft post-closure renewal permit and state the nature of the issue(s) to be raised during the hearing. Written hearing requests should be sent to the Illinois EPA contact listed below by the end of the comment period. If applicable, public notice of a public hearing will be given at least 30 days in advance of a hearing.

Sarah Brubaker, Office of Community Relations (#5)
Illinois Environmental Protection Agency
1550 West Iles Avenue, P.O. Box 19276
Springfield, Illinois 62794-9276

Email: Sarah.Brubaker@Illinois.gov
Phone: (217) 785-0799
TDD phone number (866) 273-5488

All comments received will become part of the Administrative Record (AR) and will be evaluated by the Illinois EPA in making the final post-closure renewal permit decision. The Illinois EPA will respond to comments on the draft post-closure renewal permit and indicate whether additional documents have been included in the AR. Commenters will be notified of the final post-closure renewal permit decision and the permit decision appeal process.

The AR, including the renewal permit application, draft renewal permit, related information and all data submitted by the applicant, is now available for public inspection. Please call the Illinois EPA contact above for an appointment to view the documents at Illinois EPA office in Springfield. Copies of the draft permit and fact sheet are available at https://epa.illinois.gov/public-notices/final-permit-public-notice.html.

The facility is located in an area of Environmental Justice concern. More information concerning Environmental Justice may be found at https://epa.illinois.gov/topics/environmental-justice.html.

For further RCRA information, please visit https://www.epa.gov/rcra.

11:47 AM · Aug 8, 2025 · 27 Views

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

MEMORANDUM

DATE: September 25, 2025

TO: Takako Halteman, P.E. – RCRA Unit

FROM: Aidan Fullriede – Groundwater Unit
AF AMB

SUBJECT: Response to Public Comments on the Draft Permit

RE: 1770200010 -- Stephenson County
Modern Plating Corporation
ILD0005172325
Log No. B-167R2
RCRA Permits Administrative Record – 24D
Permit Approval

The draft renewed RCRA Hazardous Waste Permit (Permit) for Modern Plating Corporation in Freeport, Illinois (Modern Plating) was issued August 5, 2025 (Log No. B-167R2). The public comment period for this draft renewed Permit ended September 22, 2025. The only public comments received were those submitted by Modern Plating in a letter dated September 19, 2025 and received by Illinois EPA on September 24, 2025. This letter contained 17 comments which included five groundwater related comments. Only these groundwater related comments are addressed herein.

The groundwater related comments are reproduced below in italicized font in their entirety and are followed by the Illinois EPA response. This Illinois EPA response should be included in the Illinois EPA's Response to Comments issued with the final renewed Permit.

Comment 1
Fact Sheet Condition II.A

Statement says they are a "chrome plating facility", but they are not anymore, they are an "electroplating facility". List of hazardous constituents says "chromium, cyanide, and chlorinated solvents". Cyanide is not a contaminant of concern in groundwater.

The facility currently does electroplating, so this description should say "electroplating" instead of chrome plating. We request that cyanide be removed from the list of hazardous constituents in groundwater.

Illinois EPA Response to Comment 1
Cyanide has been identified as one of the historical hazardous constituents in the listed hazardous waste, F002, which was managed at the facility and placed in the corrective action management unit (CAMU). Cyanide is directly related to the waste managed in the CAMU; therefore, Illinois EPA considers cyanide a necessary constituent to be monitored. A condition has been added to Section V.B.1 for the facility to submit a Class 1* permit modification to demonstrate cyanide does not need to be added to the list of hazardous constituents to be monitored in Section III. The fact sheet is not part of the final permit.

Comment 2
Fact Sheet Condition III.B.1.a

The compliance period during which the groundwater protection standard applies shall be extended until the Permittee demonstrates that the groundwater protections standards of 35 IAC Part 620 have not been exceeded at the GMZ boundary for three consecutive years. In the previous RCRA permit, the standard was two consecutive years.

We request that this requirement be corrected to two consecutive years.

Illinois EPA Response to Comment 2
The Illinois EPA acknowledges this comment and notes that it is repeated as Comment 7 to Permit Condition III.D.3. In response to Comment 2, the Illinois EPA does not include a fact sheet with the final permit issuance, so no revision is necessary. The Permit will not be revised at this time in response to this comment.

Comment 7
Permit Condition III.D.3

The compliance 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. In the previous RCRA permit, the standard was two consecutive years.

We request that this requirement be corrected to two consecutive years.

Illinois EPA Response to Comment 7
While the current GMZ boundary does not currently coincide with the compliance point for the CAMU, GMZs are intended to reduce in size over time based on effective

corrective action. Therefore, eventually the GMZ boundary should be comprised of wells located at the downgradient boundary of the CAMU. Although the previous RCRA permit only required the facility's GMZ boundary wells meet the groundwater protection standards of 35 IAC Part 620 for two consecutive years prior to terminating the GMZ, the correct time frame is three years. The regulations for facilities in corrective action programs under 35 IAC 724.200 require: "The owner or operator may terminate corrective action measures taken beyond the period equal to the active life of the waste management area (including the closure period) if the owner or operator can demonstrate, based on data from the groundwater monitoring program... that the groundwater protection standard of [35 IAC] Section 724.192 has not been exceeded for a period of three consecutive years." Therefore, the Illinois EPA has determined the groundwater monitoring program for corrective action measures (i.e. the GMZ) will not be terminated until such time as the groundwater protection standard has not been exceeded for three consecutive years at the groundwater monitoring program boundary. While the CAMU is not considered a landfill, listed hazardous waste material is contained within the unit and the groundwater must be managed equivalent to a RCRA hazardous waste management unit described in 35 IAC 724.200 and in accordance with 35 IAC 703.121. The Permit will not be revised in response to this comment.

Comment 8
Permit Condition III.H.2

Semiannual groundwater sampling is required.

A large amount of historical data is available to established seasonal fluctuations and trends. Groundwater concentrations have stabilized, and semiannual sampling is no longer required. We request that groundwater sampling frequency be reduced to once every two years.

Illinois EPA Response to Comment 8
The Illinois EPA acknowledges this comment but notes that any requests to change the groundwater monitoring program should be made in a permit modification request rather than in response to the draft permit. In order to make this request, the facility may submit a Class 1* permit modification to the Illinois EPA with information supporting the request. However, at this time, the Illinois EPA notes the facility is in corrective action and there is no apparent evidence to support reducing the groundwater sampling frequency to anything less than semiannual. The Permit will not be revised in response to this comment.

Comment 12
Permit Condition B.2.e

A water well survey is needed.

A water well survey was included in the 2021 RCRA Part B Renewal Application. We ask that this request be removed.

Illinois EPA Response to Comment 12
The Illinois EPA acknowledges the drinking water well survey submitted with the revised 2021 RCRA Part B Renewal Application dated January 8 and May 7, 2021. The Permit has been revised to remove Condition V.B.2.e in response to this comment.

Comment 16
Permit Condition B.1.i

Submit proposal to address the continued exceedances.

We addressed this in the Corrective Action Modification Request submitted to Illinois EPA 10-2024. We request to remove this requirement from the final permit.

Illinois EPA Response to Comment 16
The Illinois EPA acknowledges the comment and will respond to the October 15, 2024 submittal. The Permit has been revised to remove Condition V.B.1.i in response to this comment.

BOL Permit Section RCRA Tracking Sheet

BOLSiteCode ***1770200010*** *Federal ID(s)* ***ILD005172325*** *Respond by:* ***10/29/2025***

Site: ***Modern Plating Corp*** *Region:* ***Rockford***

City: Freeport *County:* Stephenson

Data Regarding Logged Submittal(s) per Log # ***B-167R2***

Review Status	PermitClass	AppType	Reviewers: RCRA, CAU, DAU, GAU			RCRA GAU
Inactive	Renewal Part B Pmt	RCRA Part B	COS			AF

DocTitle_Description	Submittal Type	Review Type	Agency Response
39(i) form	Additional Info	Technical	Draft Permit

Date Received 07/31/2025 Date Due 10/29/2025 Date Mailed 08/05/2025

Submittal Comment:

LPC-PA23 permit application form for renewal, RCRA Subtitle C site ID form, and fire inspection report	1st Submittal	Technical	

Date Received 06/05/2025 Date Due 09/03/2025 Date Mailed

Submittal Comment:

Response to NOD	Resp-Technical NOD	Technical	

Date Received 05/11/2021 Date Due 08/09/2021 Date Mailed

Submittal Comment:

Renewal Part B Permit application	1st Submittal	Technical	Technical NOD

Date Received 01/08/2021 Date Due 04/08/2021 Date Mailed 03/05/2021

Submittal Comment:

BOLSiteCode ***1770200010*** *Federal ID(s)* ***ILD005172325*** *Respond by:* ***10/29/2025***

Site: ***Modern Plating Corp*** *Region:* ***Rockford***

City: Freeport *County:* Stephenson

Data Regarding Logged Submittal(s) per Log # ***B-167R2***

Final Action Data

For Log No: B-167R2

Units Addressed	Final Action Status	Date FA Issued	Date NFA	Date Closure Cert Accepted	Acres Remediated
	Approved	09/30/2025			0

Closure Type:	Institutional Control	Clean Closed:	1 Institutional Control:	2 Institutional Control:
	☐			

RCRA Attt
Review of
Comments to Draft Permit

REVIEW NOTES
For Public Comments to Draft Permit
1770200010 – Stephenson County
Modern Plating Corporation
ILD 005 172 325
Log No. B-167R2

9/29/25

Reviewer: Takako Halteman PE

Draft Permit Issuance
The Bureau of Land's Permit Section has issued a draft renewed RCRA permit for Modern Plating Corporation (MPC) to allow for continued post-closure care for an on-site Corrective Action Management Unit (CAMU). Illinois EPA has accepted public comments on the draft RCRA permit from August 8, 2025, through September 22, 2025. Public Notice information is included in

MCP, located at 701 South Hancock Avenue in Freeport (Stephenson County), is situated on a 19-acre property, and has been operating as a chrome plating facility. Historically, several impoundments are used manage the waste wastewater and sludge from the plating operation. During the closure and corrective action of the hazardous and non-hazardous surface impoundments and solid waste management units (SWMUs), a CAMU, approximately 1.2 acres in size, was constructed in the two of the former impoundment areas, and approximately 22,800 yd^3 of remediation waste generated from the closure and corrective action were placed in the CAMU. The CAMU was certified closed on August 6, 2001, which is also the date that the initial 30-year post-closure period began.

In addition to continued post-closure care of the CAMU, the draft renewed RCRA permit requires MPC to update and provide financial assurance for a rolling 30-year post closure cost and to conduct corrective action to assess for a potential indoor vapor intrusion at the site.

Public Notice information is included in Public Participation Section of the Administrative Record.

Public Comments and Illinois EPA Responses to Comments
The Illinois EPA's responses below address comments from Foth Infrastructure & Environment, LLC (Foth) on behalf of Modern Plating Corporation (MPC) dated September 19, 2025, pertaining to the draft RCRA Post-Closure permit issued August 5, 2025. MPC's comments are listed in italics and the Illinois EPA response follow.

Comment 1
Fact Sheet, Section IIA; Statement says they are a "chrome plating facility", but they are not anymore, they are an "electroplating facility". List of hazardous constituents says "chromium, cyanide, and chlorinated solvents". Cyanide is not a contaminant of concern in groundwater.

The facility currently does electroplating, so this description should say "electroplating" instead of chrome plating. We request that cyanide be removed from the list of hazardous constituents in groundwater.

Illinois EPA Response
GWU addressed this comment.

Comment 2
Fact Sheet, Section III.8.1.a; The compliance 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.** In the previous RCRA permit, the standard was **two consecutive years.***

We request that this requirement be corrected to two consecutive years.

Illinois EPA Response
GWU addressed this comment.

Comment 3
Condition II.C.1 and II.C.2; Corrective Action Activities are ongoing at the site and the 30-yr post-closure period is coming to an end. Post-closure care period of the CAMU must be extended for an additional 30-yr period or until no unacceptable risk to human health and the environment are present.

We object to the extension of the post-closure care period for an additional 30-year period. IEPA's additional requirements are arbitrary and capricious. There is evidence of natural attenuation of groundwater contaminants of concern and few exceedances of groundwater standards in the GMZ wells, so an additional 30-year post-closure care period is not warranted. A 10-year extension is more appropriate. Post- closure care will be revisited when the RCRA Part B permit is due to be renewed.

Illinois EPA Response
The Illinois EPA is required to establish permit conditions that are protective of human health and the environment and can request a facility to establish or modify their RCRA Permit to meet these conditions in accordance with 35 IAC 703.241 and 35 IAC 724.218(d).

The CAMU at the facility is in the initial 30-year post-closure care period in accordance with 35 IAC 724.217(a)(1) Post-Closure Care Period, which states:

> "1) Post-closure care for each hazardous waste management unit subject to the requirements of Section 724.217 through 724.220 must begin after completion of closure of the unit and continue for 30 years after that date..."

Conditions II.C.1 and II.C.2 require to extend the post closure care period, by way of Class 2 permit modification, to extend for 30 years or until such time as no unacceptable risks to human health and the environment exists. If the facility does not propose to extend for an additional 30 years, then the facility must demonstrate that there are no unacceptable risks to human health and the environment at the required permit modification date, August 6, 2030.

It must be noted that the wastes placed in the 1.2-acre CAMU include 14,500 cubic yards of electroplating sludge (F002 and F006 listed wastes) and remediated contaminated materials, which will continue to be remain in the CAMU. Post-closure care of the CAMU is necessary to prevent any releases of hazardous constituents and potential risks to human health and the environment.

According to the most recent annual leachate report, 18,265 gallons of leachate was generated between July 1, 2024 through June 30, 2025, which is the maximum volume of leachate ever reported for this CAMU since the reporting started in 2003. Furthermore, this is after no leachate (zero gallons) was reported for 13 years between September 1, 2010 and June 30, 2023. A total of 2000 gallons of leachate was reported for 2024. As indicated, corrective action

for groundwater at the site continues, and such significant increases of leachate generation is considered a potential threat to human health and the environment. In addition, apparent violations were noted in Illinois EPA Violation Notice L-2023-00363 associated with the leachate management system during an August 4, 2023 site inspection by the Illinois EPA.

It is noted that the current evaluation to determine if the extension of post-closure care period is necessary is based on, but may not be limited to, the following applicable regulations and reference materials (which are subject to change when they are updated or any new applicable guidance become available):

a. The following sections of 35 IAC Part 724: 724.131, 724.210 through 724.220, 724.410.

b. 35 IAC 703.241, 35 IAC 724.218(d), and 35 IAC 703 Appendix A, E.2;

c. Sections 12(a), 21(n) and 39(g) of the Illinois Environmental Protection Act (Act);

d. USEPA's Guideline for Evaluating Post-Closure Care Period, dated December 15, 2016; and

e. ASTSWMO Position Paper, dated July 20, 2022 "Post-Closure Care Beyond 30 Years at RCRA Subtitle C Facilities".

This condition remains unchanged.

Comment 4
Condition II.E.7.d; Leachate collection and removal system should be maintained so that the depth of leachate over the liner in Phase I and II of the CAMU do not exceed 1 foot.

The system is designed to turn on at 18 inches. Lowering it to 1 foot burns out the pump. We request that this requirement be changed to 18 inches.

Illinois EPA Response
In accordance with 35 IAC 724.401(a)(2), 724.401(c)(2), and 724.351(a)(2), leachate depth exceeding 12 inches (30 centimeter) is prohibited. This requirement was also included in Condition II.C.6.e of the previous permit. Although Conditions II.C.6, f and g of the previous permit also included erroneous ground elevations for the leach collection and removal system, the requirements of applicable regulations (i.e., 35 IAC 724.401(a)(2), 724.401(c)(2), and 724.351(a)(2)) must be met and the condition was revised to reflect the requirement of no more than a 12-inch accumulation of leachate. It must be noted that this requirement ensures that no excessive liquid is generated to compromise the integrity of the liner and waste containment system of the CAMU and to prevent impacting the groundwater.

Illinois EPA understands that the facility cannot comply with the requirement using the current pump system. Thus, the facility must develop a plan to come in compliance with the requirement by developing and submitting a workplan to correct the leachate collection system within 90 days of the effective date of the Permit. This requirement is reflected in Condition V.B.1.g of the Permit. This condition remains unchanged.

Comment 5
Condition II.G.1; Must have financial assurance of at least $413,858 adjusted annually for inflation.

We object to this requirement because IEPA's additional requirements are arbitrary and capricious. This is different from the current structure and is financially burdensome.

Illinois EPA Response
The CAMU at the facility is in the initial 30-year post-closure care period. In accordance with 35 IAC 724.244 (a)(2), the post-closure care cost estimate is calculated by multiplying the annual post-closure cost estimate by the number of years of post-closure care required under 35 IAC 724.217. As 35 IAC 724.217(a)(1) requires minimum of 30-year of post closure care, post closure care cost estimate for the 30 year of post-closure care period is required.

Furthermore, the Illinois EPA has evaluated the requirements for post-closure care, cost estimates, and financial assurance for the hazardous waste management unit based on the applicable regulations and documents referenced in the Illinois EPA's response to Comment 3 and has determined that financial assurance equivalent to the rolling 30-year post-closure care cost estimate is minimally necessary to address such financial risks to the State and the citizens of Illinois at the unit with hazardous waste left in place and undergoing post-closure care. Therefore, the post-closure cost estimate must be calculated by multiplying the annual post-closure cost estimate by 30 (the number of years required in the CAMU post-closure care period).

35 IAC 724.245 outlines the financial assurance mechanisms required and available to RCRA facilities. A RCRA-permitted facility shall maintain financial assurance for 30 years for the entire post-closure care period unless it has completed a post-closure activity or made changes to the post-closure plan, which would cause a reduction in the post-closure cost estimate. If a post-closure activity is completed or a change in a post-closure plan is approved, the facility may submit a request for a reduced post-closure cost estimate to Illinois EPA. This condition remains unchanged.

Comment 6
Condition II.G.2; Post-closure care costs are determined by multiplying annual costs by the full 30-yr post-closure period.

We object to this requirement because IEPA's additional requirements are arbitrary and capricious. This is different from the current structure and is financially burdensome.

Illinois EPA Response
See Illinois EPA Response to Comment 5. This condition remains unhanged.

Comment 7
*Condition III.D.3; The compliance 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.** In the previous RCRA permit, the standard was **two consecutive years.***

We request that this requirement be corrected to two consecutive years.

Illinois EPA Response
GWU addressed this comment.

Comment 8
Condition III.H.2; Semiannual groundwater sampling is required.

A large amount of historical data is available to establish seasonal fluctuations and trends. Groundwater concentrations have stabilized, and semiannual sampling is no longer required. We request that groundwater sampling frequency be reduced to once every two years.

Illinois EPA Response
GWU addressed this comment.

Comment 9
Condition V.A; 39i Certification.

IEPA indicated that they received the form, nothing further needed. We ask that this request be removed.

Illinois EPA Response
The Illinois EPA acknowledge that it was erroneously indicated to the MPC representative that this condition was to be removed as commented by the Illinois EPA project manager. However, after further examination of the condition, it was identified that this condition is a standard condition for every RCRA permit. The intention of this condition is to inform and remind the Permittee that a completed 39i form is necessary to be submitted every time a permit modification request is made to the Illinois EPA. Thus, this condition remains unchanged.

Comment 10
Condition V.B.2.a; Submit updated survey plat.

There is no need to add additional hazardous waste storage areas or features because Modern Plating does not have additional waste storage, they do not store hazardous waste from electroplating, but instead they transfer it and ship it out regularly. We ask that this request be removed.

Illinois EPA Response
As indicated in Illinois EPA response to Comment 3, the Illinois EPA must include conditions in a permit to ensure compliance with all requirements of the applicable regulations for conducting post-closure care of the CAMU. A survey of the CAMU has not been completed for 24 years since the closure was completed in 2001. As indicated in Illinois EPA Response to Comment 4, sudden generation of excess amount of leachate after 13 years raises a significant concern for the integrity of the CAMU. In order to identify the current conditions of the CAMU, identify any settlement or other movement of benchmarks, an updated survey of the CAMU is necessary. This condition remains unchanged.

Comment 11
Condition V.B.1.b and c; Identification and descriptions of any hazardous waste management units and solid waste management units at the facility.

There is no need to add additional hazardous waste storage areas or features because Modern Plating does not have additional waste storage, they do not store hazardous waste from electroplating, but instead they transfer it and ship it out regularly. We ask that this request be removed.

Illinois EPA Response
The Illinois EPA clarifies that *"any hazardous waste management units and solid waste management units"* referenced in this condition are not any regulated unit under this Permit. It is required that such information must be included in Section B of the RCRA permit application but the information was not provided. Furthermore, the facility indicated during a site visit in April 2025 that a release of chemical managed at the facility has occurred in the past since the last renewed permit was issued. Such information was not included nor reported under the requirement in Condition IV.D of the previous permit. A renewal application for a RCRA permit must include complete information of the current industrial activities conducted at the permitted facility and identify any past releases, which may or may not require further corrective action under the RCRA permit requirement. According to the U.S. EPA RCRA database, RCRAInfo, the Permittee is listed as a large quantity hazardous waste generator. This means that the facility should have a dedicated less than 90-day hazardous waste storage area to meet the requirements of 35 IAC 722.117. Please provide additional information to fulfill the application requirement in this condition.

Comment 12
Condition V.B.2.e; A water well survey is needed.

A water well survey was included in the 2021 RCRA Part B Renewal Application. We ask that this request be removed.

Illinois EPA Response
GWU addressed this comment

Comment 13
Condition V.B.1.f; Submit most recent documentation for annual cleaning of leachate collection and leak detection systems with high- pressure jetting system.

The lines of the leachate collection system are not designed to be cleaned by high pressure jetting. The PVC may not be strong enough to withstand the pressure. Also, the lines are one-inch PVC and a small enough jetting head is not available to fit.

Illinois EPA Response
The Illinois EPA acknowledges this comment. However, this condition was developed based on the MPC's approved permit application. Section D.3 and Table B-2 (Post Closure Maintenance Plan) of the approved permit application indicated "clean the interior piping annually" for both the Leachate Collection System and Leachate Detection System. Furthermore, Appendix Q of the approved permit application included a CAMU Construction Documentation Report, which was referenced in Section 3.3 of the approved permit application. Section 12.4 of Appendix Q included "Pipe Cleaning" section, which states that "[t]he leachate and leak detection pipes will be cleaned annually with a high pressure water jetting system." If this method of cleaning is no longer applicable and the facility desires to utilize another method of cleaning, MPC may submit a proposal to revise this cleaning method. Regardless of the cleaning method utilized to date,

MPC must submit the most recent documentation for the annul pipe cleaning program for the leachate collection and detection system.

Based on the comment provided above, Condition V.B.1.f was modified to add the following language:

If a high-pressure jetting system cannot be used to clean the pipes annually, the Permittee must include an alternative method of annual cleaning in the document prepared under Condition V.B.1.e.

Comment 14
Condition V.B.1.g; Submit a workplan to modify the current leachate system such that the leachate depth over the liner does not exceed one foot. Auto activate leachate pump at one foot.

The system is designed to turn on at 18 inches. Lowering it to 1 foot burns out the pump. We request that this requirement be changed to 18 inches.

Illinois EPA Response
See Illinois EPA Response to Comment 4.

Comment 15
Condition V.B.1.h; Submit revised post-closure cost estimate and financial assurance to meeting required minimum of 30 yrs post-closure.

We object to this requirement because IEPA's additional requirements are arbitrary and capricious. This is different from the current structure and is financially burdensome.

Illinois EPA Response
Historically, during the post-closure care period, the facility's financial assurance liability has been allowed to be reduced by prorating with the number of years completed, generally down to minimum of ten (10) years. However, this prorated-reduction or the minimum of 10-years did not take into consideration the financial risk to the Illinois EPA and citizens of Illinois, if the Illinois EPA would have to unexpectedly assume operation of the post-closure care at the facility. The Illinois EPA has evaluated the requirements for post-closure care, cost estimates, and financial assurance for the hazardous waste management unit(s) under 35 IAC Part 724, and has determined that financial assurance equivalent to the rolling 30-year post-closure care cost estimate is minimally necessary to address such financial risks to the State if any hazardous waste is left in place at the unit. If any evidence shows that the estimated cost should be higher than the 30-year cost, then it should be adjusted to a higher number of years. As required by 35 IAC 724.217(a) (1), a 30-year post closure care cost is required for establishing financial assurance. Any adjustment to this 30-year requirement must be made through a permit modification. Also see Illinois EPA Response to Comment 5 for additional response.

Comment 16
Condition V.B.1.i; Submit proposal to address the continued exceedances.

We addressed this in the Corrective Action Modification Request submitted to IEPA 10-2024. We request to remove this requirement from the final permit.

Illinois EPA Response
GWU addressed this comment

Comment 17
Attachment H, Table 1 Sample Parameters; Leachate Sampling Parameter and method list

The PAH method 550 should be updated to 8270 since 550 is for drinking water samples and 8270 is used currently. We request that this be updated in the final permit.

Illinois EPA Response
The Illinois EPA agrees with MPC's comment. The analytical method for PAHs has been revised to Method 8270.

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

SEP 30 2025

9589 0710 5270 0389 7166 67

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 – 24D
Permit Approval

Dear Mr. Stenberg:

Attached is a final renewed Resource Conservation and Recovery Act (RCRA) Hazardous Waste Management Post-Closure permit (Permit) for the above-referenced facility. The final permit decision 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) 705.211.

Please read the RCRA Permit carefully. Failure to meet any portion of the RCRA Permit could result in civil and/or criminal penalties. The only comments received on the draft RCRA Permit were from Foth Infrastructure & Environment, LLC (Foth) on behalf Modern Plating Corporation (MPC). The Illinois EPA's responses to MPC's comments are attached to this letter.

This action shall constitute the Illinois EPA's final action on the subject submittal. The applicant may appeal this final decision to the Illinois Pollution Control Board pursuant to Section 40 of the Environment Protection Act (Act) by filing a petition for a hearing within 35 days after the date of issuance of the final decision. However, the 35-day period may be extended for a period of time not to exceed 90 days by written notice from the applicant and the Illinois EPA within the initial 35-day appeal period.

If the owner or operator wishes to receive a 90-day extension, a written request that includes a statement of the date the final decision was received, along with a copy of this decision, must be sent to the Illinois EPA as soon as possible.

For information regarding the request for an extension, please contact:

Illinois Environmental Protection Agency
Division of Legal Counsel
2520 West Iles Avenue
Post Office Box 19276
Springfield, IL 62794-9276
217/782 5544

For information regarding the filing of an appeal, please contact:

Illinois Pollution Control Board
60 East Van Buren St., Suite 630
Chicago, IL 60605-1241
312/814-3620

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

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

Attachments: Illinois EPA's Responses to Comments
Renewed RCRA Hazardous Waste Management Post-Closure Permit

JLR: TNH:1770200010-RCRA-B167R2-Approval.docx
TNH AMB JF

cc: David Servatius – Modern Plating Corp.
Heather Hallett, Foth
Andrea K. Martin, P.E., Foth
Norberto Gonzalez, USEPA Region V
Emily Keener, USEPA Region V

ILLINOIS EPA'S RESPONSES TO COMMENTS
DRAFT RCRA HAZARDOUS WASTE MANAGEMENT POST-CLOSURE PERMIT
DATED August 5, 2025
Modern Plating Corporation
RCRA PERMIT LOG NO. B-167R2

The Illinois EPA's responses below address comments from Foth Infrastructure & Environment, LLC (Foth) on behalf of Modern Plating Corporation (MPC) dated September 19, 2025, pertaining to the draft RCRA Post-Closure permit issued August 5, 2025. MPC's comments are listed in italics and the Illinois EPA response follow.

Comment 1

Fact Sheet, Section IIA; Statement says they are a "chrome plating facility", but they are not anymore, they are an "electroplating facility". List of hazardous constituents says "chromium, cyanide, and chlorinated solvents". Cyanide is not a contaminant of concern in groundwater.

The facility currently does electroplating, so this description should say "electroplating" instead of chrome plating. We request that cyanide be removed from the list of hazardous constituents in groundwater.

Illinois EPA Response

Illinois EPA acknowledges that MPC is a former chrome plating facility and is currently operating as an electroplating facility. The fact sheet is not a part of the final permit.

Cyanide has been identified as one of the historical hazardous constituents in the listed hazardous waste, F002 along with F006, which was managed at the facility and placed in the corrective action management unit (CAMU). Cyanide is directly related to the waste managed in the CAMU; therefore, Illinois EPA considers cyanide a necessary constituent to be monitored. A condition has been added to Section V.B.2 for the facility to submit a Class 1* permit modification to demonstrate cyanide does not need to be added to the list of hazardous constituents to be monitored in Section III.

Comment 2

*Fact Sheet, Section III.8.1.a; The compliance 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.** In the previous RCRA permit, the standard was **two consecutive years.***

We request that this requirement be corrected to two consecutive years.

Illinois EPA Response
The Illinois EPA acknowledges this comment and notes that it is repeated as Comment 7 to Permit Condition III.D.3. In response to Comment 2, the Illinois EPA does not include a fact sheet with the final permit issuance, so no revision is necessary. The Permit will not be revised at this time in response to this comment.

Comment 3
Condition II.C.1 and II.C.2; Corrective Action Activities are ongoing at the site and the 30-yr post-closure period is coming to an end. Post-closure care period of the CAMU must be extended for an additional 30-yr period or until no unacceptable risk to human health and the environment are present.

We object to the extension of the post-closure care period for an additional 30-year period. IEPA's additional requirements are arbitrary and capricious. There is evidence of natural attenuation of groundwater contaminants of concern and few exceedances of groundwater standards in the GMZ wells, so an additional 30-year post-closure care period is not warranted. A 10-year extension is more appropriate. Post- closure care will be revisited when the RCRA Part B permit is due to be renewed.

Illinois EPA Response
The Illinois EPA is required to establish permit conditions that are protective of human health and the environment and can request a facility to establish or modify their RCRA Permit to meet these conditions in accordance with 35 IAC 703.241 and 35 IAC 724.218(d).

The CAMU at the facility is in the initial 30-year post-closure care period in accordance with 35 IAC 724.217(a)(1) Post-Closure Care Period, which states:

> "1) Post-closure care for each hazardous waste management unit subject to the requirements of Section 724.217 through 724.220 must begin after completion of closure of the unit and continue for 30 years after that date..."

Conditions II.C.1 and II.C.2 require to extend the post closure care period, by way of Class 2 permit modification, to extend for 30 years or until such time as no unacceptable risks to human health and the environment exists. If the facility does not propose to extend for an additional 30 years, then the facility must demonstrate that there are no unacceptable risks to human health and the environment at the required permit modification date, August 6, 2030.

It must be noted that the wastes placed in the 1.2-acre CAMU include 14,500 cubic yards of electroplating sludge (F002 and F006 listed wastes) and remediated contaminated materials, which will continue to be remain in the CAMU. Post-closure

care of the CAMU is necessary to prevent any releases of hazardous constituents and potential risks to human health and the environment.

According to the most recent annual leachate report, 18,265 gallons of leachate was generated between July 1, 2024 through June 30, 2025, which is the maximum volume of leachate ever reported for this CAMU since the reporting started in 2003. Furthermore, this is after no leachate (zero gallons) was reported for 13 years between September 1, 2010 and June 30, 2023. A total of 2000 gallons of leachate was reported for 2024. As indicated, corrective action for groundwater at the site continues, and such significant increases of leachate generation is considered a potential threat to human health and the environment. In addition, apparent violations were noted in Illinois EPA Violation Notice L-2023-00363 associated with the leachate management system during an August 4, 2023 site inspection by the Illinois EPA.

It is noted that the current evaluation to determine if the extension of post-closure care period is necessary is based on, but may not be limited to, the following applicable regulations and reference materials (which are subject to change when they are updated or any new applicable guidance become available):

a. The following sections of 35 IAC Part 724: 724.131, 724.210 through 724.220, 724.410.

b. 35 IAC 703.241, 35 IAC 724.218(d), and 35 IAC 703 Appendix A, E.2;

c. Sections 12(a), 21(n) and 39(g) of the Illinois Environmental Protection Act (Act);

d. USEPA's Guideline for Evaluating Post-Closure Care Period, dated December 15, 2016; and

e. ASTSWMO Position Paper, dated July 20. 2022 "Post-Closure Care Beyond 30 Years at RCRA Subtitle C Facilities".

This condition remains unchanged.

Comment 4
Condition II.E.7.d; Leachate collection and removal system should be maintained so that the depth of leachate over the liner in Phase I and II of the CAMU do not exceed 1 foot.

The system is designed to turn on at 18 inches. Lowering it to 1 foot burns out the pump. We request that this requirement be changed to 18 inches.

Illinois EPA Response
In accordance with 35 IAC 724.401(a)(2), 724.401(c)(2), and 724.351(a)(2), leachate depth exceeding 12 inches (30 centimeter) is prohibited. This requirement was also included in Condition II.C.6.e of the previous permit. Although Conditions II.C.6, f and g of the previous permit also included erroneous ground elevations for the leachate collection and removal system, the requirements of applicable regulations (i.e., 35 IAC 724.401(a)(2), 724.401(c)(2), and 724.351(a)(2)) must be met and the condition was revised to reflect the requirement of no more than a 12-inch accumulation of leachate. It must be noted that this requirement ensures that no excessive liquid is generated to compromise the integrity of the liner and waste containment system of the CAMU and to prevent impacting the groundwater.

Illinois EPA understands that the facility cannot comply with the requirement using the current pump system. Thus, the facility must develop a plan to come in compliance with the requirement by developing and submitting a workplan to correct the leachate collection system within 90 days of the effective date of the Permit. This requirement is reflected in Condition V.B.1.g of the Permit. This condition remains unchanged.

Comment 5
Condition II.G.1; Must have financial assurance of at least $413,858 adjusted annually for inflation.

We object to this requirement because IEPA's additional requirements are arbitrary and capricious. This is different from the current structure and is financially burdensome.

Illinois EPA Response
The CAMU at the facility is in the initial 30-year post-closure care period. In accordance with 35 IAC 724.244 (a)(2), the post-closure care cost estimate is calculated by multiplying the annual post-closure cost estimate by the number of years of post-closure care required under 35 IAC 724.217. As 35 IAC 724.217(a)(1) requires minimum of 30-year of post closure care, post closure care cost estimate for the 30 year of post-closure care period is required.

Furthermore, the Illinois EPA has evaluated the requirements for post-closure care, cost estimates, and financial assurance for the hazardous waste management unit based on the applicable regulations and documents referenced in the Illinois EPA's response to Comment 3 and has determined that financial assurance equivalent to the rolling 30-year post-closure care cost estimate is minimally necessary to address such financial risks to the State and the citizens of Illinois at the unit with hazardous waste left in place and undergoing post-closure care. Therefore, the post-closure cost estimate must be

calculated by multiplying the annual post-closure cost estimate by 30 (the number of years required in the CAMU post-closure care period).

35 IAC 724.245 outlines the financial assurance mechanisms required and available to RCRA facilities. A RCRA-permitted facility shall maintain financial assurance for 30 years for the entire post-closure care period unless it has completed a post-closure activity or made changes to the post-closure plan, which would cause a reduction in the post-closure cost estimate. If a post-closure activity is completed or a change in a post-closure plan is approved, the facility may submit a request for a reduced post-closure cost estimate to Illinois EPA. This condition remains unchanged.

Comment 6
Condition II.G.2; Post-closure care costs are determined by multiplying annual costs by the full 30-yr post-closure period.

We object to this requirement because IEPA's additional requirements are arbitrary and capricious. This is different from the current structure and is financially burdensome.

Illinois EPA Response
See Illinois EPA's Response to Comment 5. This condition remains unchanged.

Comment 7
Condition III.D.3; The compliance 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.*** *In the previous RCRA permit, the standard was* ***two consecutive years.***

We request that this requirement be corrected to two consecutive years.

Illinois EPA Response
While the current GMZ boundary does not currently coincide with the compliance point for the CAMU, GMZs are intended to reduce in size over time based on effective corrective action. Therefore, eventually the GMZ boundary should be comprised of wells located at the downgradient boundary of the CAMU. Although the previous RCRA permit only required the facility's GMZ boundary wells meet the groundwater protection standards of 35 IAC Part 620 for two consecutive years prior to terminating the GMZ, the correct time frame is three years. The regulations for facilities in corrective action programs under 35 IAC 724.200, specifically 35 IAC 724.200(f), require: "The owner or operator may terminate corrective action measures taken beyond the period equal to the active life of the waste management area (including the closure period) if the owner or operator can demonstrate, based on data from the groundwater

monitoring program... that the groundwater protection standard of [35 IAC] Section 724.192 has not been exceeded for a period of three consecutive years." Therefore, the Illinois EPA has determined the groundwater monitoring program for corrective action measures (i.e. the GMZ) will not be terminated until such time as the groundwater protection standard has not been exceeded for three consecutive years at the groundwater monitoring program boundary. While the CAMU is not considered a landfill, listed hazardous waste material is contained within the unit and the groundwater must be managed equivalent to a RCRA hazardous waste management unit described in 35 IAC 724.200 and in accordance with 35 IAC 703.121. The Permit will not be revised in response to this comment.

Comment 8
Condition III.H.2; Semiannual groundwater sampling is required.

A large amount of historical data is available to establish seasonal fluctuations and trends. Groundwater concentrations have stabilized, and semiannual sampling is no longer required. We request that groundwater sampling frequency be reduced to once every two years.

Illinois EPA Response
The Illinois EPA acknowledges this comment but notes that any requests to change the groundwater monitoring program should be made in a permit modification request rather than in response to the draft permit. In order to make this request, the facility may submit a Class 1* permit modification to the Illinois EPA with information supporting the request. However, at this time, the Illinois EPA notes the facility is in corrective action and there is no apparent evidence to support reducing the groundwater sampling to a frequency less than semiannual. The Permit will not be revised in response to this comment.

Comment 9
Condition V.A; 39i Certification.

IEPA indicated that they received the form, nothing further needed. We ask that this request be removed.

Illinois EPA Response
The Illinois EPA acknowledges that it erroneously indicated to the MPC representative that this condition was to be removed. The intention of this condition is to inform and remind the Permittee that a completed 39i form is necessary to be submitted every time a permit modification request is made to the Illinois EPA. Thus, this condition remains unchanged.

Comment 10
Condition V.B.2.a; Submit updated survey plat.

There is no need to add additional hazardous waste storage areas or features because Modern Plating does not have additional waste storage, they do not store hazardous waste from electroplating, but instead they transfer it and ship it out regularly. We ask that this request be removed.

Illinois EPA Response
As indicated in Illinois EPA's response to Comment 3, the Illinois EPA must include conditions in a permit to ensure compliance with all requirements of the applicable regulations for conducting post-closure care of the CAMU. A survey of the CAMU has not been completed for 24 years since the closure was completed in 2001. As indicated in Illinois EPA's Response to Comment 4, sudden generation of excess amount of leachate after 13 years raises a significant concern for the integrity of the CAMU. In order to identify the current conditions of the CAMU, identify any settlement or other movement of benchmarks, an updated survey of the CAMU is necessary. This condition remains unchanged.

Comment 11
Condition V.B.1.b and c; Identification and descriptions of any hazardous waste management units and solid waste management units at the facility.

There is no need to add additional hazardous waste storage areas or features because Modern Plating does not have additional waste storage, they do not store hazardous waste from electroplating, but instead they transfer it and ship it out regularly. We ask that this request be removed.

Illinois EPA Response
The Illinois EPA clarifies that *"any hazardous waste management units and solid waste management units"* referenced in this condition are not any regulated unit under this Permit. It is required that such information must be included in Section B of the RCRA permit application but the information was not provided. Furthermore, the facility indicated during a site visit in April 2025 that a release of chemical managed at the facility has occurred in the past since the last renewed permit was issued. Such information was not included nor reported under the requirement in Condition IV.D of the previous permit. A renewal application for a RCRA permit must include complete information of the current industrial activities conducted at the permitted facility and identify any past releases, which may or may not require further corrective action under the RCRA permit requirement. According to the U.S. EPA RCRA database, RCRAInfo, the Permittee is listed as a large quantity hazardous waste generator. This means that the facility should have a dedicated less than 90-day hazardous waste storage area to meet

the requirements of 35 IAC 722.117. Please provide additional information to fulfill the application requirement in this condition.

Comment 12
Condition V.B.2.e; A water well survey is needed.

A water well survey was included in the 2021 RCRA Part B Renewal Application. We ask that this request be removed.

Illinois EPA Response
The Illinois EPA acknowledges the drinking water well survey submitted with the revised 2021 RCRA Part B Renewal Application dated January 8 and May 7, 2021. The Permit has been revised to remove Condition V.B.2.e in response to this comment.

Comment 13
Condition V.B.1.f; Submit most recent documentation for annual cleaning of leachate collection and leak detection systems with high- pressure jetting system.

The lines of the leachate collection system are not designed to be cleaned by high pressure jetting. The PVC may not be strong enough to withstand the pressure. Also, the lines are one-inch PVC and a small enough jetting head is not available to fit.

Illinois EPA Response
The Illinois EPA acknowledges this comment. However, this condition was developed based on the MPC's approved permit application. Section D.3 and Table B-2 (Post Closure Maintenance Plan) of the approved permit application indicated "clean the interior piping annually" for both the Leachate Collection System and Leachate Detection System. Furthermore, Appendix Q of the approved permit application included a CAMU Construction Documentation Report, which was referenced in Section 3.3 of the approved permit application. Section 12.4 of Appendix Q included "Pipe Cleaning" section, which states that "[t]he leachate and leak detection pipes will be cleaned annually with a high pressure water jetting system." If this method of cleaning is no longer applicable and the facility desires to utilize another method of cleaning, MPC may submit a proposal to revise this cleaning method. Regardless of the cleaning method utilized to date, MPC must submit the most recent documentation for the annul pipe cleaning program for the leachate collection and detection system.

Based on the comment provided above, Condition V.B.1.f was modified to add the following language:

If a high-pressure jetting system cannot be used to clean the pipes annually, the Permittee must include an alternative method of annual cleaning in the document prepared under Condition V.B.1.e.

Comment 14

Condition V.B.1.g; Submit a workplan to modify the current leachate system such that the leachate depth over the liner does not exceed one foot. Auto activate leachate pump at one foot.

The system is designed to turn on at 18 inches. Lowering it to 1 foot burns out the pump. We request that this requirement be changed to 18 inches.

Illinois EPA Response

See Illinois EPA's Response to Comment 4.

Comment 15

Condition V.B.1.h; Submit revised post-closure cost estimate and financial assurance to meet required minimum of 30 yrs post-closure.

We object to this requirement because IEPA's additional requirements are arbitrary and capricious. This is different from the current structure and is financially burdensome.

Illinois EPA Response

Historically, during the post-closure care period, the facility's financial assurance liability has been allowed to be reduced by prorating with the number of years completed, generally down to minimum of 10 years. However, this prorated-reduction or the minimum of 10 years did not take into consideration the financial risk to the Illinois EPA and citizens of Illinois, if the Illinois EPA would have to unexpectedly assume operation of the post-closure care at the facility. The Illinois EPA has evaluated the requirements for post-closure care, cost estimates, and financial assurance for the hazardous waste management unit(s) under 35 IAC Part 724, and has determined that financial assurance equivalent to the rolling 30-year post-closure care cost estimate is minimally necessary to address such financial risks to the State if any hazardous waste is left in place at the unit. If any evidence shows that the estimated cost should be higher than the 30-year cost, then it should be adjusted to a higher number of years. As required by 35 IAC 724.217(a) (1), a 30-year post closure care cost is required for establishing financial assurance. Any adjustment to this 30-year requirement must be made through a permit modification. Also see Illinois EPA's Response to Comment 5 for additional response.

Comment 16
Condition V.B.1.i; Submit proposal to address the continued exceedances.

We addressed this in the Corrective Action Modification Request submitted to IEPA 10-2024. We request to remove this requirement from the final permit.

Illinois EPA Response
The Illinois EPA acknowledges the comment and will respond to the October 15, 2024 submittal. The Permit has been revised to remove Condition V.B.1.i in response to this comment.

Comment 17
Attachment H, Table 1 Sample Parameters; Leachate Sampling Parameter and method list

The PAH method 550 should be updated to 8270 since 550 is for drinking water samples and 8270 is used currently. We request that this be updated in the final permit.

Illinois EPA Response
The Illinois EPA agrees with MPC's comment. The analytical method for PAHs has been revised to Method 8270.

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: SEP 30, 2025
Effective Date: NOV 04, 2025
Expiration Date NOV 04, 2035

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)).

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

AMB TNH LF
JLR: TNH:1770200010-RCRA-B167R2-Approval.docx

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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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 yd^3. 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)
"A" Groundwater Monitoring Wells				
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

Field Parameters	STORET Number	Reporting 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. <u>Lagoon 0, Lagoon 1, Lagoon 1A, Lagoon 2 , Lagoon 3</u>

   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). If a high-pressure jetting system cannot be used to clean

the pipes annually, the Permittee must include an alternative method of annual cleaning in the document prepared under Condition V.B.1.e.

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)*

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 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*)

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

g. A demonstration that cyanide does not need to be added to the hazardous constituent list monitored in groundwater in accordance with Section III.

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

CONDITION	SUBMITTAL	DUE DATE
III.H.4	Groundwater flow rate and direction in the uppermost aquifer, submitted with second semi-annual groundwater report.	October 15
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

CONDITION	SUBMITTAL	DUE DATE
		permit and update as necessary.
IV.I.3	Submit financial assurance.	Within 60 days of the approval of the initial cost estimate and as 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.
SECTION 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.

CONDITION	SUBMITTAL	DUE DATE
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.
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.		

1770200010 – Modern Plating Corporation
Log No. B-167R2
Page A-1 of A-6

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 die-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.

Date of IEPA Letter and Log No.	Brief Description of Action
April 17, 2000 (No Log No.)	Monitoring well installation documentation, MW-23B and MW-23C IEPA accept documentation of wells constructed along GMZ.
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.

Date of IEPA Letter and Log No.	Brief Description of Action
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.
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, I* 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.

Date of IEPA Letter and Log No.	Brief Description of Action
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
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.

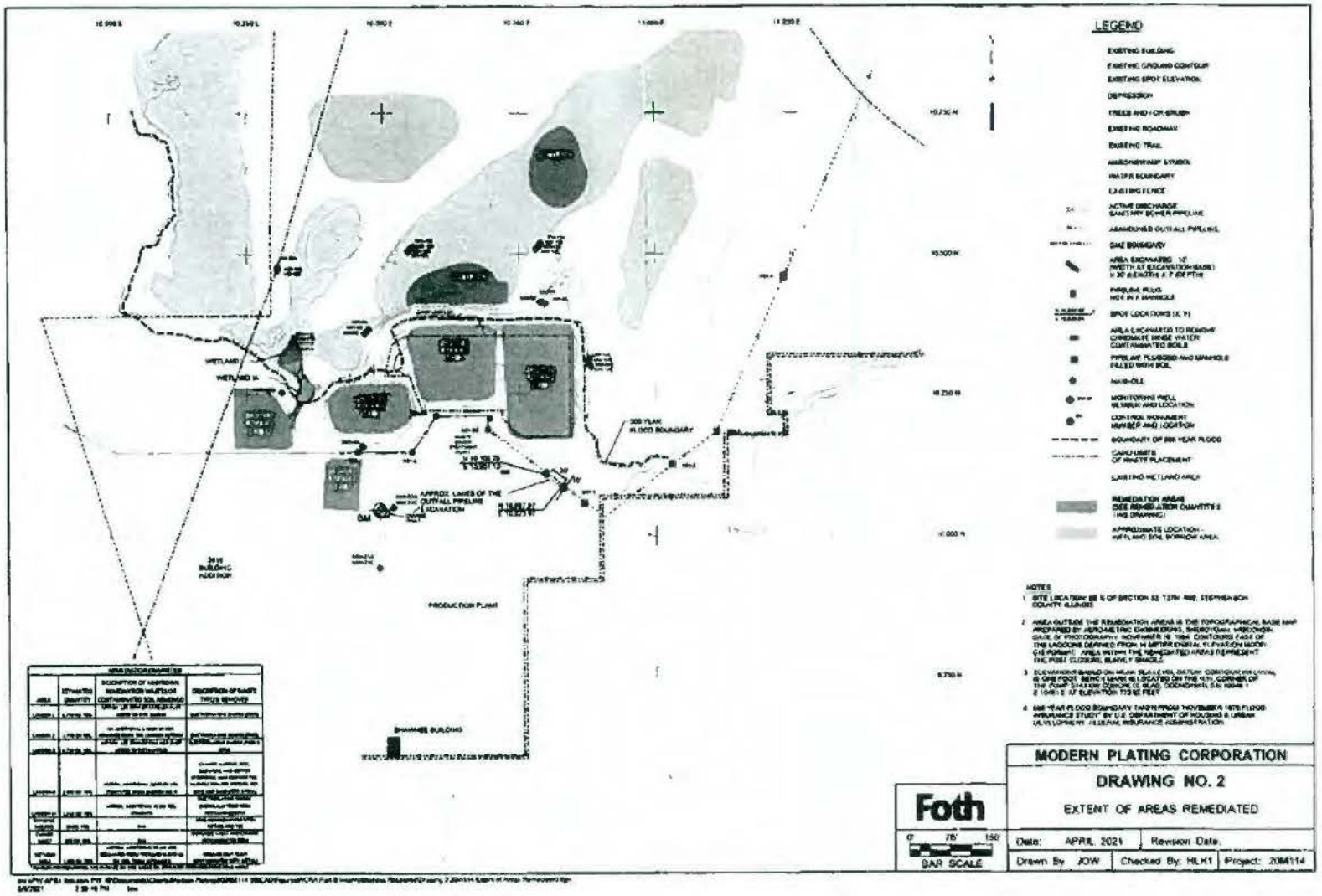
ATTACHMENT E

FACILITY MAPS

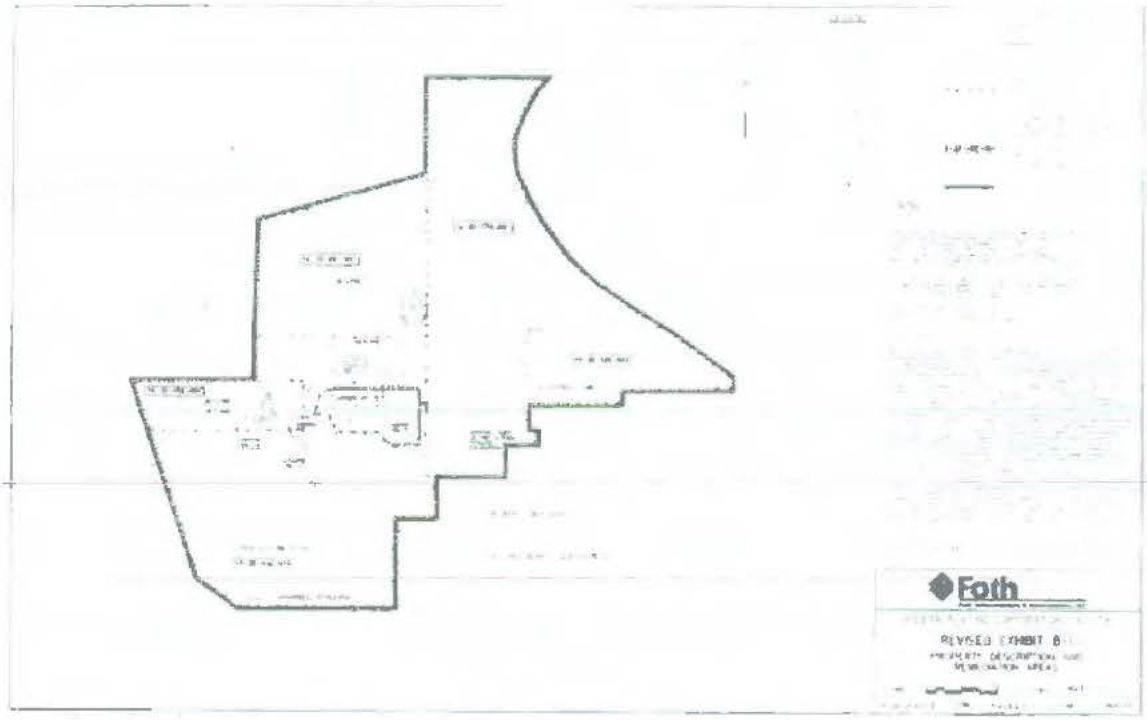
STATE ID # 1770200010

ILD005172325

Post-Closure Permit Log No. B-167R2



1770200010 – Modern Plating Corporation
Log No. B-167R2
Page E-1 of E-2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REVISED EXHIBIT B

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.

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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.