Dear Mr. Troike

Attached is a draft renewal Resource Conservation and Recovery Act (RCRA) Post-Closure permit and fact sheet for the above-referenced facility. This draft permit is being sent to you again because the public notice dates have been revised. The draft permit is based on the administrative record contained in the Illinois EPA’s files. The contents of the administrative record are described in 35 Ill. Adm. Code 705.144.

Under the provisions of 35 Ill. Adm. Code 705.141(d), the draft permit and administrative record must be publicly noticed and made available for public review and comment. The Illinois EPA must also provide an opportunity for a public hearing. Copies of the draft decision, fact sheet, and renewal permit application are available for review on the Illinois EPA website at: https://www2.illinois.gov/epa/public-notices/Pages/general-notices.aspx. 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 August 17, 2020.

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

Veronica Tellez, Office of Community Relations (#5)
Illinois Environmental Protection Agency
1021 North Grand Avenue East
Post Office Box 19276
Springfield, Illinois 62794-9276
Illinois EPA will issue a final renewal permit after the close of the public comment period unless the Illinois EPA decides to reverse the tentative decision. The appeal process and limitations are addressed in 35 Ill. Adm. Code 705.212.

Please note, the facility has satisfied Condition 2 of the Illinois EPA letter dated November 25, 2019 (B-61R-M-29) with information provided in Revision 3 of the renewal permit application, dated February 14, 2020.

If you have any questions concerning this draft renewal permit, please contact Kelly Huser at 217/524-3867.

Sincerely,

[Signature]

Kenneth E. Smith, P.E., Manager
Permit Section
Division of Land Pollution Control
Bureau of Land

KES: KDH:0418080001-RCRA-B61R2-Draft(2).docx

Attachments: Fact Sheet
Draft RCRA Post-Closure Renewal Permit

cc: James Blough, US EPA Region V
Tammy Bennett, P.E., Cabot Corporation
Mary E. Jank, L.P.G. & Robert Harwell, P.E., Wood

Bcc: Bureau File
Champaign Region
Rob Watson
Kim Rawe
Kelly Huser
Amy Butler
FACT SHEET
for
DRAFT RCRA POST-CLOSURE RENEWAL PERMIT
Cabot Corporation
Tuscola, Illinois
STATE ID NO. 0418080001
FEDERAL ID NO. ILD042075333
RCRA POST-CLOSURE PERMIT LOG NO. B-61R2

This fact sheet has been prepared pursuant to the requirements of Title 35 Illinois Administrative Code (Ill. Adm. Code) Section 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 Resource Conservation and Recovery Act (RCRA) post-closure renewal permit.

This permit requires Cabot Corporation (Cabot) to provide at least 30 years post-closure care for a closed hazardous waste surface impoundment (D83) and a closed treatment tank area (T01). The post-closure care period for the closed hazardous waste surface impoundment began on December 14, 1987. The post-closure care period for the closed treatment tank area began on February 22, 1995. Procedures for the reduction or extension of the post-closure care period are set forth in 35 Ill. Adm. Codes 724.217(a) (2) (A) and 724.217(a) (2) (B) respectively.

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

I. INTRODUCTION

The draft permit for Cabot contains all of the standard conditions required by 35 Ill. Adm. Code Parts 702, 703, and 724; and the applicable conditions of 35 Ill. Adm. Code Part 724 for post-closure care of a closed hazardous waste surface impoundment and a hazardous waste treatment tank area. The Cabot Corporation facility is an existing facility that has been operating under a RCRA post closure permit first issued on September 30, 1994 (B-61) and the renewal permit issued September 16, 2009 (B-61R) that was most recently revised on November 25, 2019 (B-61R-M-29).

II. DESCRIPTION OF FACILITY

A. General

Cabot Corporation is a manufacturer (NAICS 325180) of fumed metal oxides. Cabot's primary product is called Cab-O-Sil. The physical and chemical properties of Cab-O-Sil provide certain desired characteristics as an additive to an assortment of products. Cab-O-Sil can be found in inks, paints, toothpastes, adhesives, cosmetics, resins, etc. Cab-O-Sil provides an anti-clump property for resins and adds strengths to silicon rubber and caulking. For most other products
it is used for its flow-enhancing characteristic. The Federal Food and Drug Administration has approved certain grades of Cab-O-Sil as a substance allowed in the manufacturing of material in direct contact with food. Hazardous waste managed at this facility includes dilute hydrochloric acid waste, laboratory waste, maintenance and process cleanout related wastes, leachate from pre-RCRA disposal areas, and sediment from a waste accumulation tank. In the past, the facility managed both wastes received from off-site and a chlorosilane vaporizer bottom waste generated at the plant.

The closed Vaporizer Bottom Treatment Tank (T01) treated chlorosilanes (D003), silicon tetrachloride (D003) raw material, and perchloroethylene (PCE). Cabot could not certify that all hazardous constituents were removed during closure; therefore, the tank area is subject to post-closure requirements. The Vaporizer Treatment Tank Area was certified closed on February 22, 1995, after the tank was removed, and the Tank Area was included in the Post-Closure Care Plan.

The surface impoundment, which was closed as a Land Disposal Unit (D83), stored waste from off-site and acidic waste (D002) that contained concentrations of perchloroethylene, trichloroethylene, 1,1-dichloroethylene, 1,2-dichloroethylene, methylene chloride, and acetone. The surface impoundment was certified closed (as a landfill) by the Illinois EPA in a letter dated October 10, 1989, however post-closure care began on December 14, 1987. A RCRA-compliant, low-permeability cap was placed over the impoundment during closure. On March 5, 2018, Illinois EPA approved an extension of the 30-year post-closure care period for the closed surface impoundment to at least February 22, 2025.

B. Site Description

Cabot Corporation is located three miles west of Tuscola, Illinois, directly north of U.S. Highway 36 in Douglas County. The land owned by Cabot covers approximately 170.5 acres. Operations at this location started in 1958. LyondellBasell - Equistar Chemical is located to the west and northwest of Cabot. The remaining land use in the area surrounding Cabot is primarily agricultural.

III. HAZARDOUS WASTE MANAGEMENT ACTIVITIES

A. Post-Closure

The following hazardous waste management units shall be provided with post-closure care:
Type of Waste Unit  | Capacity | Wastes Contained
--- | --- | ---
Surface Impoundment (D83) Closed | 13,000 Cubic Yards  
300 ft. x 250 ft. x 10 ft. | Primarily acidic waste and operations waste
Vaporizer Bottoms Treatment Tank (T01) Closed | 3,000 Gallons | Treated chlorosilanes, silicon tetrachloride raw material, and the one-time treatment of perchloroethylene (PCE) silty residue

Post-closure permit conditions deal with monitoring, maintaining, and recordkeeping of the hazardous waste management unit(s) described above in accordance with the provisions of the post-closure care plan. Section II of the permit contains conditions specific to post-closure and implement the regulatory requirements of 35 Ill. Adm. Code Part 724, Subpart G.

The purpose of this RCRA post-closure permit is to require that all the referenced hazardous waste management units receive post-closure care for at least thirty (30) years. Groundwater monitoring must continue through the post-closure care period for established monitoring wells listed in Condition III.D.1, 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 surface impoundment (D83). A written record of the post-closure inspections and maintenance activities performed must be kept at the facility.

B. Groundwater Program

Contamination has been detected in the groundwater as dissolved hazardous waste constituents from the regulated units at the Tuscola facility. A compliance monitoring program has transitioned to a corrective action monitoring program at the facility. The groundwater in the uppermost aquifer will continue to be monitored by a series of groundwater wells at various locations around the closed surface impoundment (D83) and treatment tank (T01) areas. A groundwater extraction system continues to remove contaminated groundwater, preventing it from migrating off-site. In addition, a specialized cement grout mixture will be used to minimize grout failure at any newly installed monitoring wells or replacement wells. Cabot Corporation is required to report groundwater quality to the Illinois EPA on a routine basis. Permit Conditions in Section III of the permit are specific to compliance monitoring and implement the regulatory requirements of 35 Ill. Adm. Code Part 724, Subpart F.
C. Corrective Action

Facilities with RCRA permits are required to conduct corrective action, as necessary, on solid waste management units at the facility. Under the initial RCRA permit, Cabot investigated, and as necessary, conducted remedial efforts at eight solid waste management units. The corrective action provisions of the renewed RCRA Post-Closure permit require that Cabot continue to address two of these units, the Ponds Solids Disposal Area and Leachfield.

D. Standard Conditions

Standard Permit Conditions are regulatory requirements of 35 Ill. Adm. Code, 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 permits, and compliance schedules.

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 facility is required to obtain a permit to install or operate any process that is, or may be, a source of air pollutants. Cabot has a permit for sources of air emissions (Title V Air Permit No. 96030080). There are no air emissions from either of the two RCRA regulated units (closed surface impoundment and closed treatment tank).

B. Water

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. Cabot has discharge permits (NPDES # IL0004375, Domestic Waste Sludge Disposal Permit No. 2016OE60882). There are no discharges from either of the two regulated units (closed surface impoundment and closed treatment tank unit) to a NPDES permitted outfall.
C. **Underground Injection Control (UIC)**

Cabot operates two UIC hazardous waste disposal wells. These wells are not subject to this RCRA permit. They are permitted by an Illinois EPA Hazardous Waste Class I UIC Permit (Permit No. UIC-011-CC). Groundwater from extraction well pumping and from sampling events at the RCRA units is discharged to the permitted UIC wells.

V. **PROCEDURES FOR REACHING A FINAL DECISION**

Pursuant to 35 Ill. Adm. Code 705.162 (a) (2), the public is given at least forty-five (45) days to review the application and comment on the draft permit conditions prior to Illinois EPA taking any final permitting action on the application for this RCRA Hazardous Waste Management Post-Closure Permit. The comment period will begin on, July 1, 2020, 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 August 17, 2020.

Copies of the permit application, draft permit and fact sheet are available for review on the Illinois EPA website at: [https://www2.illinois.gov/epa/public-notices/Pages/general-notices.aspx](https://www2.illinois.gov/epa/public-notices/Pages/general-notices.aspx).

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 Veronica Tellez 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, shall indicate opposition to the draft permit 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 forty-five (45) days before the hearing date.

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

Veronica Tellez, Office of Community Relations, #5
Illinois Environmental Protection Agency
1021 N. Grand Avenue East
When the Illinois EPA makes its final permit decision, notice will be given to the applicant and each person who has submitted written comments or requested notice of the final permit decision. The permit will become effective thirty-five days (35) after service of notice of the decision, or at a later date if stated in the permit, unless the decision is appealed.
RCRA HAZARDOUS WASTE MANAGEMENT POST-CLOSURE PERMIT

0418080001 — Douglas County
ILD042075333
Cabot Corporation
Permit Log No. B-61R2
RCRA Administrative Record

PERMITTEE
Cabot Corporation
Attn: Carl Troike, Facility General Manager
700 East. US Highway 36
Tuscola, Illinois 61953-9643


PERMITTED HAZARDOUS WASTE ACTIVITY
This permit requires Cabot Corporation to conduct the following hazardous waste activities in accordance with the approved permit application and the conditions in this permit:

Post-Closure Care: of the closed Surface Impoundment (D83) & Treatment Tank Area (T01)
Groundwater Monitoring: Corrective Action Program
Corrective Action: of two solid waste management units

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

This permit is issued based on the information submitted in the approved permit application identified in Attachment 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 Ill. Adm. Code 702.187 and 702.186) and potential enforcement action (415 ILCS 5/44(h)).

DRAFT

Kenneth E. Smith, P.E., Manager
 Permit Section
 Division of Land Pollution Control
 Bureau of Land

KES: KDH:0418080001-RCRA-B61R2-Draft(2).docx
RCRA POST-CLOSURE PERMIT

ISSUED TO

CABOT CORPORATION

TUSCOLA, ILLINOIS

ILD042075333

STATE ID # 0418080001

POST-CLOSURE PERMIT LOG NO. B-61R2
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## LIST OF ATTACHMENTS

- Attachment A — Point of Compliance Depiction | A-1
- Attachment B — Groundwater Corrective Action Monitoring Program Attachments | B-1 to B-7
- Attachment C — Approved Permit Application Identification | C-1
- Attachment D — Corrective Action and Post-Closure Cost Estimate Summary | D-1
- Attachment E — Facility Maps | E-1 to E-2
SECTION I: GENERAL FACILITY DESCRIPTION

A. OWNER AND OPERATOR

The facility is owned and operated by Cabot Corporation, herein referred to as the "Permittee." (35 Ill. Adm. Code 702.121, 702.123 & 703.181)

Cabot Corporation
700 East US Highway 36
Tuscola, IL. 61953

B. LOCATION

1. Location of Facility

The Cabot Corporation facility is located in Douglas County, Illinois. Cabot Corporation owns approximately 170.5 acres at this location with approximately 58 acres devoted to the management of hazardous waste. The Cabot Corporation facility is located at:

Cabot Corporation
700 East US Highway 36
Tuscola, Illinois 61953

The facility contact is Tammy Bennett, P.E, Environmental Manager. She can be reached at 217-253-5591 or tammy.bennett@cabotcorp.com.

2. Facility Maps

The general location of the facility is shown on Figure 1, Attachment E of this permit. The location of the closed surface impoundment (D83) and closure treatment tank area (T01) are shown on the facility drawing in Attachment E of this permit.

C. DESCRIPTION OF HAZARDOUS WASTE MANAGEMENT ACTIVITIES

Hazardous waste managed at this facility includes dilute hydrochloric acid waste, laboratory waste, maintenance and process cleanout related wastes, leachate from pre-RCRA disposal areas and sediment from a waste accumulation tank. In the past, the facility managed both waste received from off-site and a chlorosilane vaporizer bottom waste generated at the plant.

The closed Vaporizer Bottom Treatment Tank (T01) treated chlorosilanes (D003), silicon tetrachloride (D003) raw material, and perchloroethylene (PCE). Cabot could not certify
that all hazardous constituents were removed during closure; therefore, the tank area is subject to post-closure requirements. The Vaporizer Treatment Tank Area was certified closed on February 22, 1995, after the tank was removed, and the Tank Area was included in the Post-Closure Care Plan.

The surface impoundment, which was closed as a Land Disposal Unit (D83), stored waste from off-site and acidic waste (D002) that contained concentrations of perchloroethylene, trichloroethylene, 1,1-dichloroethylene, 1,2-dichloroethylene, methylene chloride, and acetone. The surface impoundment was certified closed (as a landfill) by the Illinois EPA in a letter dated October 10, 1989, however post-closure care began on December 14, 1987. A RCRA-compliant, low-permeability cap was placed over the impoundment during closure.
SECTION II: POST-CLOSURE

A. SUMMARY

The closed surface impoundment (D83) and the Vaporizer Bottom Treatment Tank (T01) must receive post-closure care until at least February 22, 2025 in accordance with 35 Ill. Adm. Code 724.217. Activities required during post-closure include, but are not limited to, 1) maintenance of final cover, 2) groundwater monitoring, and 3) providing financial assurance for post-closure activities pursuant to 35 Ill. Adm. Code Part 724. There is no leachate collection system for the closed surface impoundment as the waste in this unit was solidified before placing the final cover.

B. UNIT IDENTIFICATION

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

<table>
<thead>
<tr>
<th>Unit Designation</th>
<th>Capacity</th>
<th>Surface Area Dimensions of Unit (Acres)</th>
<th>Description of Waste and Hazardous Waste No.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Surface Impoundment (D83) Closed</td>
<td>13,000 Cubic Yards</td>
<td>2 acres (approximate)</td>
<td>Primarily acidic waste (D002) and operations waste</td>
</tr>
<tr>
<td>Vaporizer Bottoms Treatment Tank (T01) Closed</td>
<td>3,000 Gallons</td>
<td>40 ft. x 80 ft. (approximate)</td>
<td>Treated chlorosilanes (D003), silicon tetrachloride (D003) raw material, and perchloroethylene (PCE) silty residue</td>
</tr>
</tbody>
</table>

2. The location and horizontal extent of the closed surface impoundment and closed treatment tank area is identified in Attachment A of this permit. The highest elevation of the final cover system for the closed surface impoundment is at or below approximately 700 ft msl (mean sea level). The elevation at the closed treatment tank area is approximately 693 ft msl.

3. The liner system on the bottom and sides of the closed surface impoundment was a dense clay till.

4. The cover system on the top of the closed surface impoundment is constructed of the following layers, described from the top to bottom:
• 18 inches of topsoil
• 6 inches of compacted gravel
• 2 feet of compacted clay

5. A survey plat indicating the location and dimensions of the closed surface impoundment and treatment tank area 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 closed surface impoundment and treatment tank area in accordance with the applicable Subpart G regulations. These notes state:
   a. The waste materials contained in the surface impoundment and treatment tank area are considered RCRA hazardous wastes. They include, primarily acidic waste (D002), operations waste, treated chlorosilanes (D003), silicon tetrachloride (D003) raw material, and perchloroethylene (PCE) silty residue.
   b. Any material removed from the surface impoundment and treatment tank area during future activities must be managed as a hazardous waste in accordance with 35 Ill. Adm. Code Subtitle G: Waste Disposal.
   c. The use of this area is restricted.

6. The Plat of Survey (PIN 09-02-31-400-00300) and Drawing No. 0-IC-0-061 were filed with the Douglas County Recorder's Office in Tuscola, IL on April 10, 1995. The record data is Document No. 200530, Book No. 349, Page 196-197.

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 treatment tank area and surface impoundment 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 treatment tank area and closed surface impoundment was filed with the Illinois EPA and the County Recorder.

C. POST-CLOSURE CARE PERIOD

1. The post-closure care period for the closed surface impoundment began on December 14, 1987, the date of completion of closure of the unit listed in Condition II.B.1 of this permit (the date the permittee submitted the certification of closure to the Illinois EPA)
and continued for thirty (30) years after that date. The post-closure care period for the closed surface impoundment was extended beyond 30 years until at least February 22, 2025 because groundwater contamination from the closed surface impoundment does not meet the standard at 35 Ill. Adm. Code Part 620 and Part 724.

The post-closure care period for the closed treatment tank began on February 22, 1995, the date of completion of closure of the unit listed in Condition II.B.1 of this permit (the date the permittee submitted the certification of closure to the Illinois EPA) and must continue for at least thirty (30) years after the date.

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

3. The Permittee shall not allow any use of the units designated in Condition II.B.1 which will disturb the integrity of the final cover, liners, any components of the containment system, or the function of the facility's monitoring systems during the post-closure care period unless such use is necessary to protect public health or the environment.

D. INSPECTIONS

1. The Permittee shall inspect the components, structures, and equipment at the site in accordance with the inspection schedule in the approved permit application and the conditions in this permit. The forms in Attachment D.3.1 of the approved permit application shall be used to document inspections and any repairs done at the facility.

2. The Permittee shall inspect the facility at least quarterly for evidence of any of the following:
   a. Deterioration, malfunctions, or improper operation of run-on and run-off systems.
   b. The deterioration of the cover systems.

3. The facility shall be inspected within 24 hours of any rain fall event of 3 or more inches in 24 hours to detect evidence of any of deterioration, malfunctions, or improper operation of run-on and run-off systems.

4. Appropriate corrective action shall be taken if problems, including erosion, blockage of the channels, slope failure, etc. are observed.

5. Results of all inspections and a description of any remedial actions taken shall be documented in the Repair Log in the Operating Record and maintained for the entire
post-closure period.

E. **MONITORING, MAINTENANCE, AND RECORDKEEPING**

1. The Permittee shall implement the Post-Closure Plan contained in the approved permit application. All post-closure care activities must be conducted in accordance with the provisions of the approved Post-Closure Plan and the conditions in this permit.

2. The Permittee shall conduct post-closure care for each hazardous waste management unit listed in Condition II.B.1 above to begin after completion of closure of the unit and continue for at least thirty (30) years after that date. The post closure care period for the closed surface impoundment has been extended to at least February 22, 2025.

3. The Illinois EPA may require, at partial and final closure, continuation of any of the security requirements during part or all of the post-closure period.

4. The Permittee shall maintain and monitor the groundwater monitoring system and comply with the other applicable regulations of 35 Ill. Adm. Code 724 Subpart F (Groundwater Protection) during the post-closure period.

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

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

   b. Prevent run-on and run-off from eroding or otherwise damaging the final cover.

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

6. The Permittee shall maintain a record of all inspections, monitoring, and maintenance activities in the facility's operating record. A copy of the operating record must be kept on-site during the entire post-closure period.

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 Ill. Adm. Code Parts 702, 703 and 724 and must include a copy of the amended Post-Closure Plan for approval by the Illinois EPA.
2. If the Permittee or any subsequent owner or operator of the land upon which the surface impoundment or treatment tank area listed in Condition B above is located wishes to remove hazardous wastes and hazardous waste residues, the liner (if any), or contaminated soils, then he or she must request a modification to this post-closure permit in accordance with the applicable requirements in 35 Ill. Adm. Code 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 Ill. Adm. Code 724.217(c).

3. No later than sixty (60) days after completion of the established post-closure care period for each hazardous waste disposal unit listed in Condition II.B.1 of this permit, the Permittee shall submit to the Illinois EPA Bureau of Land Permit Section by registered mail, a certification that the post-closure care for the hazardous waste disposal unit was performed in accordance with the specifications in the approved Post-Closure Plan. The certification must be signed by the owner or operator and a qualified Professional Engineer.

A Post-Closure Documentation Report must be developed and submitted to Illinois EPA as part of the post-closure certification statement to document the post-closure care conditions and activities at your facility during the post-closure period. The Post-Closure Documentation Report must include the following (as applicable):

a. Background information about the facility and the unit subject to the post-closure certification. Describe the facility and RCRA permit history of the unit.

b. A detailed description of the unit subject to the post-closure care certification that includes:

i. The Unit’s design, including liner system, sumps, leachate collection, leak detection, & gas systems, and cover system including stormwater run-off & run-on controls.

ii. How it was operated, and how it was closed.

iii. When it was operated, and when it was closed.

iv. The wastes disposed of in the unit (including waste codes).

v. The amount of leachate pumped each year from each sump in the unit’s leachate collection and leak detection systems during the post-closure period. Provide this information in both a table and graphically. Demonstrate the unit has met the requirements of 35 Ill. Adm. Code 724.410(b)(2).
vi. A scaled map showing location of the unit within the facility. Include all
to in the groundwater monitoring system for the unit on this map.

vii. Scaled drawings (plan view and cross-section) showing the horizontal and
vertical extent, and all design components of the unit. The scale of the plan
view should be 1 inch = 200 feet.

viii. Surveys of the unit (certified by a professional land surveyor): 1) when it
was certified closed, 2) every 10 years since it was certified closed, and 3)
when post-closure care ended.

c. A general discussion on the inspection and maintenance of, and repairs to, the
cover system, leachate collection, leak detection, gas collection, stormwater run-
off & run-on controls, and wells in the groundwater monitoring system. Describe
any problems and/or repairs to these systems that were addressed over the post-
closure care period in chronological order. Show the locations of each of the
repairs to these systems during post-closure care on a scaled drawing of the unit.

d. A discussion on the groundwater monitoring program, including any corrective
measures that were completed during the post-closure care period and a summary
of the three (3) most recent years of groundwater data. Identify the horizontal and
vertical extent of any groundwater contaminant plume from the unit that existed at
the beginning of the post-closure period and every 5 years after that. The facility
must have complied with all requirements of 35 Ill. Adm. Code 620 and 724 in
order to certify completion of post-closure care activities.

e. Colored photos of unit(s) at post-closure completion.

f. Submit Illinois EPA form LPC-PA23 with report.

4. Within 60 days after receiving certifications from the owner or operator and a qualified
professional engineer that the post-closure care period has been completed for the
closed surface impoundment or closed treatment tank area listed in Condition II.B.1 of
this permit 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 shall maintain financial assurance for post-closure care of the closed surface impoundment and the closed treatment tank listed in Condition II.B of this permit of at least the amount of $1,244,100 (2019 dollars). A summary of the cost estimate for post-closure care of this facility is shown in Attachment D to this permit. The financial assurance maintained by the facility shall be sufficient to meet the requirements of 35 Ill. Adm. Code 724 Subpart H.

2. Post-closure care costs are determined by multiplying annual costs by either the full 30-year post-closure care period, or the post-closure care period remaining at the time the estimate is prepared. However, financial assurance for a minimum of ten (10) years of post-closure care costs shall be maintained at all times.
SECTION III: GROUNDWATER CORRECTIVE ACTION MONITORING PROGRAM

A. SUMMARY

Hazardous waste constituents have been detected in groundwater monitoring wells in the vicinity of the hazardous waste units (D83 and T01) at concentrations above background values and the applicable standards. Therefore, a Groundwater Corrective Action Monitoring Program meeting the requirements of 35 Ill. Adm. Code 724.200 must be implemented.

The Groundwater Corrective Action Program required by this Permit must include:

1. Control of the horizontal and vertical flow of the groundwater in the uppermost aquifer such that groundwater flow is towards the extraction well(s) at the Cabot facility, and well construction must be adequate to prevent migration of overlying contaminants into the uppermost aquifer. This hydraulic control shall be accomplished by withdrawing sufficient quantities of groundwater from the uppermost aquifer to prevent contaminant migration of on-site releases of product or waste. The grout used for wells at the site must meet requirements outlined in Condition III.D.8. These corrective actions will serve as the basis for establishment of the Groundwater Management Zone (GMZ) to be established in accordance with Condition III.F.8.

2. Verification the flow of groundwater is adequately controlled as required by Condition III.A.1 above via extraction well system.

3. Treatment of the groundwater withdrawn from the uppermost aquifer to control groundwater flow as required by Condition III.A.1 above. At the current time, this treatment is accomplished via disposal in the site's permitted injection wells.

4. Monitoring the quality and movement of groundwater in the uppermost aquifer beneath the facility to determine the effectiveness of the Groundwater Corrective Action Program.

B. DEFINITIONS

As used herein, the words or phrases set forth below have the following definitions:

1. “Cabot” refers to Cabot Corporation.

2. “Site” or “Facility” refers to the location at 700 East US Highway 36, Tuscola, Illinois.

3. “Permittee” refers to the Facility.

5. “RCRA” shall mean the Resource Conservation and Recovery Act as defined by Section 3.425 of the Environmental Protection Act, 415 ILCS 5/1 (latest version).

6. “ Permit” refers to the RCRA Post Closure Permit.

7. “Point of Compliance” refers to the vertical surface located at the hydraulically downgradient limits of the waste management areas identified as the closed surface impoundment (D83) and treatment tank area (TO1) extending down into the uppermost aquifer underlying the regulated units.

8. “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. The uppermost aquifer in the vicinity of the Cabot facility has been identified as a Class I groundwater referred to as the “60-foot Sand” unit underlying the Facility. Other overlying units present but not sampled are the Class II groundwater units referred to as the “Shallow Perched Zone” and “Clay Till”.

9. “Ft-bgs” refers to the number of feet below the ground surface.

10. “Ft-MSL” refers to the number of feet below the ground surface referenced to mean sea level.

11. “Detected” shall mean a concentration equal to or above the Practical Quantitation Limit (PQL) listed in USEPA’s SW-846 (Third Edition) or as approved by the Illinois EPA for the applicable analytical methods specified in the approved Sampling and Analysis Plan, which are incorporated by reference in Condition III.I of this permit.

12. “Progressive Increase” shall mean an increase in the concentration of a constituent in successive sampling events.

13. “Stick-up” refers to the height of the reference survey datum. This point is determined with ± 0.01 foot in relation to mean sea level, which in turn is established by reference to an established National Geodetic Vertical Datum.

14. The compliance period is the number of years equal to the active life of the waste management area, including any waste management activity prior to permitting, and the closure period.
C. IMPLEMENTATION

1. The Permittee shall implement the Groundwater Corrective Action Program upon the effective date of this permit, pursuant to 35 Ill. Adm. Code 724.200(d). On that date, the groundwater monitoring requirements set forth in this permit shall supersede those previously established for the facility.

2. The Permittee shall carry out the monitoring specified in this Permit on the groundwater beneath the Cabot Facility in Tuscola, Illinois. The uppermost aquifer beneath this site is the 60-foot sand unit underlying the facility. For the purposes of this permit and in accordance with 35 Ill. Adm. Code Part 620 regulations, the 60-foot sand unit has been designated Class I: Potable Resource Groundwater. The analytical results obtained from these groundwater monitoring wells shall be compared to the appropriate Class I concentration limits that comprise the groundwater protection standard found in Condition III.E.1 or to established background levels as appropriate.

3. The point of compliance, defined as the vertical surface located at the hydraulically downgradient limit of the waste management units that extends down into the uppermost aquifer underlying the regulated units, is delineated by wells identified as the point of compliance wells in Condition III.D.1 and depicted in Attachment A.

4. Upon establishment of the GMZ, the point of compliance will be postponed until such time that the monitoring wells at the facility have attained the applicable concentration limits found in Condition III.E.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 Ill. Adm. Code 724, Subpart F, and reflects the current conditions at the facility.

D. WELL LOCATION AND CONSTRUCTION

1. The Permittee shall construct and maintain the groundwater monitoring wells identified in the table below to allow for the collection of groundwater samples and elevations from the uppermost aquifer. The location of these wells is depicted in Figure C.7.3.A of the Approved Permit Application.

<table>
<thead>
<tr>
<th>IEPA Well No.</th>
<th>Facility Well No.</th>
<th>Well Depth (Ft-bgs)</th>
<th>Well Elevation (Ft-MSL)</th>
<th>Well Screen Interval (Ft-MSL)</th>
</tr>
</thead>
<tbody>
<tr>
<td>R127</td>
<td>R127**</td>
<td>63.00</td>
<td>629.62</td>
<td>634.53-629.76</td>
</tr>
<tr>
<td>R128</td>
<td>R128**</td>
<td>60.50</td>
<td>629.16</td>
<td>634.24-629.24</td>
</tr>
</tbody>
</table>

Groundwater Corrective Action Monitoring Program Wells
2. Construction of each monitoring well must be at a minimum in accordance with the diagram contained in Attachment B to this Permit or details and diagrams approved by the Illinois EPA. Double-cased wells must be installed in order to guard against possible cross-contamination between zones. The annular space above the sampling depth must be sealed to prevent contamination of samples and groundwater. All new monitoring wells to be installed must be continuously sampled and logged on Illinois EPA boring logs as provided in Attachment B unless otherwise approved by the Illinois EPA.

3. The Permittee shall notify the Illinois EPA within thirty (30) days in writing if any of the wells identified in Condition III.D.1 are damaged or the structural integrity has been compromised, causing the well to not serve its function or to act as a contaminant pathway. A proposal for the replacement of the subject well shall accompany this notification. The well shall not be plugged until the new well is on-line and monitoring data has been obtained and verified, unless the well is extremely damaged and would create a potential route for groundwater contamination. Prior to replacing the subject well, the Permittee shall obtain written approval from the Illinois EPA regarding the proposed installation procedures and construction.

4. Should any well become constantly dry or unserviceable, a replacement well shall be provided within ten (10) feet of the existing wells. This well shall monitor the same geologic zone as the existing well and be constructed in accordance with the current Illinois EPA groundwater monitor well construction standards at the time that the wells are replaced. A replacement well which is more than ten (10) feet from the existing well or which does not monitor the same geologic zone must be approved by
the Illinois EPA and designated as a new well.

5. **The Permittee shall submit boring logs, construction diagrams and data sheets from installation and development of a new or replacement well to the Illinois EPA at the address below within thirty (30) days of the date that installation of the well is completed. In addition, the Permittee shall submit certification that plugging and abandonment of a well was carried out in accordance with the approved procedures to the Illinois EPA at the address below within thirty (30) days of the date that the well is plugged and abandoned. All information should be submitted to the appropriate State Agencies.**

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

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

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

8. Any well installations, replacement wells, or well sealing which is performed at the site must incorporate the use of cement grout with low concentrations (less than 10%) of bentonite and a cement additive as described in Sections C.8.1.6 and C.8.3 of the Approved Permit Application.

E. **GROUNDWATER PROTECTION STANDARD**

1. The Permittee shall determine groundwater quality at groundwater monitoring wells identified in Condition III.D.1 on a semi-annual basis. Samples collected during the semi-annual events shall be analyzed for the field parameters and hazardous waste constituents below. (Total values shall be used for comparison with the groundwater quality standards. For inorganics filtered (dissolved fraction) values shall be used for statistical evaluations.)
<table>
<thead>
<tr>
<th>Field Parameters</th>
<th>Storet</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>pH</td>
<td>00400</td>
<td></td>
</tr>
<tr>
<td>Specific Conductance</td>
<td>00094</td>
<td>μmhos/cm</td>
</tr>
<tr>
<td>Temperature of Water Sample</td>
<td>00011</td>
<td>°F</td>
</tr>
<tr>
<td>Turbidity</td>
<td>45626</td>
<td>Ntus</td>
</tr>
<tr>
<td>Depth to Water (below land surface)</td>
<td>72019</td>
<td>Ft</td>
</tr>
<tr>
<td>Depth to Water (below measuring point)</td>
<td>72109</td>
<td>Ft</td>
</tr>
<tr>
<td>Elevation of Bottom of Well#</td>
<td>72020</td>
<td>Ft-MSL</td>
</tr>
<tr>
<td>Elevation of Groundwater Surface</td>
<td>71993</td>
<td>Ft-MSL</td>
</tr>
<tr>
<td>Elevation of Measuring Point (top of casing)#</td>
<td>72110</td>
<td>Ft-MSL</td>
</tr>
</tbody>
</table>

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

<table>
<thead>
<tr>
<th>Constituents</th>
<th>STORET</th>
<th>Class I</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Volatile Organic Compounds</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1,1 Dichloroethene</td>
<td>34501</td>
<td>0.007</td>
</tr>
<tr>
<td>Trans-1,2-Dichloroethene</td>
<td>34546</td>
<td>0.1</td>
</tr>
<tr>
<td>Cis-1,2-Dichloroethene</td>
<td>77093</td>
<td>0.07</td>
</tr>
<tr>
<td>Vinyl Chloride</td>
<td>39175</td>
<td>0.002</td>
</tr>
<tr>
<td>Trichloroethene</td>
<td>39180</td>
<td>0.005</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Inorganics</th>
<th>Total</th>
<th>Dissolved</th>
<th>Class I</th>
</tr>
</thead>
<tbody>
<tr>
<td>Arsenic</td>
<td>01002</td>
<td>01000</td>
<td>0.010&lt;sup&gt;1&lt;/sup&gt;</td>
</tr>
<tr>
<td>Boron</td>
<td>01022</td>
<td>01020</td>
<td>2.0&lt;sup&gt;1&lt;/sup&gt;</td>
</tr>
<tr>
<td>Chloride</td>
<td>00940</td>
<td>00941</td>
<td>200</td>
</tr>
<tr>
<td>Iron</td>
<td>01045</td>
<td>01046</td>
<td>5.0&lt;sup&gt;1&lt;/sup&gt;</td>
</tr>
<tr>
<td>Manganese</td>
<td>01055</td>
<td>01056</td>
<td>0.15&lt;sup&gt;1&lt;/sup&gt;</td>
</tr>
</tbody>
</table>

Note 1: See Condition E.1.a below for background values established for these parameters for wells R127, R128 and G130.

a. As approved in Log No. B-61R-M-18 and the Approved Permit Application, the following intrawell values have been established:
2. Background groundwater quality may be established for the parameters listed in Condition III.E.1 above for any new or replacement wells in the monitoring program as identified in Condition III.D.1. Background groundwater quality shall be established on data obtained from quarterly sampling of each well for one year, in accordance with the schedule listed in Section III.J.2. For those monitoring parameters or constituents not detected above the PQL during background gathering, the PQLs contained in Table 2 in Appendix C.7.5 of the Approved Permit Application shall be used as the established background value.

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

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

   b. For hazardous constituents without a 35 Ill. Adm. Code 620 standard, the ACLs proposed by the facility must be approved by the Illinois EPA.

F. CORRECTIVE ACTION MONITORING PROGRAM

The Permittee shall conduct the groundwater corrective action program and perform groundwater monitoring detailed in this section, in accordance with Section C of the approved permit application and as modified below:

1. The groundwater corrective action, as specified in this permit, shall continue throughout the compliance period to the extent necessary to ensure that the groundwater protection standard is not exceeded. If the groundwater corrective action system is being operated at the end of the compliance period, the compliance period is extended and the Permittee shall continue this groundwater corrective action for as long as necessary to achieve and maintain compliance with the established concentration limits in Condition III.E.1 and II.E.1.a. for a period of three consecutive years.
2. The Permittee shall determine groundwater quality at each monitoring well identified in Condition III.D.1 as follows:
   a. Samples collected from each well shall be analyzed for the hazardous constituents identified in Condition III.E.1 on the semi-annual monitoring schedule listed in Condition III.J.2.
   b. These results shall be compared to the Class I GQSs or intrawell values listed in Condition III.E.1 and III.E.1.a.
3. The Corrective Action Program shall control the horizontal and vertical flow of the groundwater in the uppermost aquifer beneath the facility and monitor the position and rate of the migration of the contaminated groundwater, as follows:
   a. The pumping from the extraction well(s) identified in Condition III.D.1 shall maintain a cone of depression to ensure groundwater flow is adequately controlled in the uppermost aquifer.
   b. The pumping rate from each well must be recorded and used to calculate the withdrawal rate for the extraction system; and also
   c. The use of cement grout with low concentrations (less than 10%) of bentonite and a cement additive as described in Sections C.8.1.6 and C.8.3, and required by Condition III.D.8, must be used to minimize grout failure and the migration of waste into the uppermost aquifer when new or replacement wells are installed.
4. The Permittee shall collect, preserve, and analyze groundwater samples pursuant to Condition III.H.
5. The Permittee shall determine the groundwater flow rate and direction in the uppermost aquifer at least annually from the monitoring well list in Condition III.D.1.
6. The Permittee shall submit the following data to the Illinois EPA semi-annually in accordance with the schedule in Condition III.J.2:
   a. A record of the amount of groundwater extracted and mass of contaminants removed from each groundwater pumping well(s).
   b. Semi-annual groundwater elevation measurements from wells identified in Condition III.D.1 above to demonstrate that groundwater flow throughout the contaminated area requiring corrective action is adequately controlled and
c. Potentiometric maps of the uppermost aquifer to demonstrate that groundwater flow is adequately controlled and contained.

7. The Permittee shall submit to the Illinois EPA, within the second semi-annual report each year, an evaluation of the effectiveness of the groundwater corrective action program and shall include at a minimum the following information:

a. The ability of the program to control groundwater flow as required by Condition III.F.3.

b. Demonstrate groundwater conditions are stable and/or improvement in the quality of groundwater beneath the facility which has resulted from the groundwater corrective action.


G. GROUNDWATER ELEVATION

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

2. The Permittee shall determine the surveyed elevation of “stick-up” referenced to MSL when a well is installed (with as-built diagrams) and every 5 years, or at the request of the Illinois EPA, or whenever the elevation changes in accordance with Condition III.J.5.

3. Elevation, as referenced to MSL, of the bottom of each monitoring well is to be reported every five (5) years. The mandatory measurement shall be taken during the first semi-annual (2nd quarter) monitoring event of that year.

H. SAMPLING AND ANALYSIS PROCEDURES

The Permittee shall use the techniques and procedures described in Section C of the approved permit application when obtaining and analyzing samples from the groundwater
monitoring wells described in Condition III.D.1 above.

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

2. Samples shall be preserved and shipped (when shipped off-site for analysis) in accordance with the procedures specified in Section C of the approved permit application.

3. Samples shall be analyzed in accordance with the procedures specified in Section C of the approved permit application.

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

I. STATISTICAL PROCEDURES

The Permittee shall use the statistical procedures described in the submittal dated Section C of the Approved Permit Application. These are in keeping with USEPA's Statistical Analysis of Groundwater Monitoring Data at RCRA Facilities, Unified Guidance (2009). The Permittee shall evaluate the quality of groundwater samples collected during semi-annual sampling events identified in Condition III.F and report any determination of a statistically significant increase within the information required by Condition III.J.11. In accordance with USEPA Unified Guidance, intrawell background values may be recalculated periodically to incorporate subsequent sampling results for parameters listed in Condition III.E.1.a above. A proposal for revised background values must be submitted as a Class 1* permit modification in accordance with Section K below.

J. REPORTING AND RECORDKEEPING

1. The Permittee shall enter all monitoring, testing and analytical data obtained in accordance with Conditions III.E, III.F, III.G, and III.H in the operating record.

2. Samples collected to meet the requirements of the groundwater monitoring program described in Condition III.E, III.F and III.H shall be collected and reported, as identified in the table below. All additional data collected for the groundwater monitoring program (as specified in Conditions III.E, III.F, III.G, III.H and III.I) shall also be submitted to the Illinois EPA in accordance with this schedule:

<table>
<thead>
<tr>
<th>Sampling Event</th>
<th>Samples Collected</th>
<th>Report Due</th>
</tr>
</thead>
<tbody>
<tr>
<td>First Semi-Annual</td>
<td>April – May</td>
<td>July 15th</td>
</tr>
<tr>
<td>Second Semi-Annual</td>
<td>October – November</td>
<td>January 15th</td>
</tr>
</tbody>
</table>
For establishing background at new or replacement wells, the following monitoring schedule applies:

<table>
<thead>
<tr>
<th>Sampling Event</th>
<th>Samples Collected</th>
<th>Report Due</th>
</tr>
</thead>
<tbody>
<tr>
<td>First Quarter</td>
<td>January – February</td>
<td>July 15th</td>
</tr>
<tr>
<td>Second Quarter</td>
<td>April – May</td>
<td>July 15th</td>
</tr>
<tr>
<td>Third Quarter</td>
<td>July – August</td>
<td>January 15th</td>
</tr>
<tr>
<td>Fourth Quarter</td>
<td>October - November</td>
<td>January 15th</td>
</tr>
</tbody>
</table>

3. Groundwater surface elevation data measured pursuant to Condition III.G.1, shall be collected at each semi-annual event and submitted to the Illinois EPA as identified in Condition III.J.2 above.

4. The Permittee shall report the groundwater flow rate and direction, as required by Condition III.F.5, during the first semi-annual sampling event (2nd quarter) of each year.

5. The Permittee shall report the surveyed elevation of the top of the well casing ("stick-up"), referenced to MSL, in accordance with the following schedule.

   a. For the wells identified in Condition III.D.1 above, every five years (during the first semi-annual sampling event (2nd quarter) of each year), or at the request of the Illinois EPA, or whenever the elevation changes.

   b. For any new wells, at the time of installation and reported in the as-built diagrams. Subsequent measurements shall be made every five (5) years (during the first semi-annual sampling event (2nd quarter) of each year), 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.D.1, referenced to MSL, is to be reported every five (5) years. This measurement shall be taken during the first semi-annual sampling event (2nd quarter) of that year in accordance with Condition III.G.3.

7. The Permittee shall maintain all equipment associated with groundwater monitoring wells. Dedicated pumps contained in monitoring wells identified in condition III.D.1 must be removed, and inspected and repaired, if necessary, every five (5) years. Information regarding the inspection and maintenance of the pumps must be reported during the first semi-annual sampling event (2nd quarter) of that year.

8. Information required by Conditions III.J.2, III.J.3, III.J.5 and III.J.6 must be submitted in an electronic format. The information is to be submitted, as fixed-width text files formatted as found in Attachment B, in accordance with the schedule found in
9. The Permittee shall submit a completed “RCRA Facility Groundwater, Leachate and Gas Reporting Form” (LPC-592, found in Attachment B), as a cover sheet for any notice or reports required by this permit for identification purposes. Only one copy of the LPC-592 must accompany your submittal. However, the Permittee must submit one (1) original and (excluding the groundwater and leachate monitoring results submitted in an electronic format) a minimum of two (2) copies of each notice or report you submit to the Illinois EPA. The form is not be used for permit modification requests.

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

11. The Permittee shall submit reports for semi-annual sampling events each year in accordance with the schedule identified in the table in Condition III.J.2 above that discusses the effectiveness of the corrective action program. This report must evaluate each set of results collected in accordance with Conditions III.E, III.F, III.G and III.H and determine whether or not the groundwater flow is being adequately controlled and whether grout failure has occurred, as required by Condition III.F.3. If it is determined that groundwater is not being adequately controlled, the Permittee shall:

   a. Notify the Illinois EPA in writing within 7 days of the date that this determination is made.

   b. Take actions as necessary to regain control of groundwater flow as required by Condition III.F.7.

   c. Submit a written report to the Illinois EPA within thirty (30) days describing the actions taken to regain control of groundwater flow. In addition, the report must contain information which demonstrates that groundwater flow is being adequately controlled.

   d. Submit a request for permit modification to the Illinois EPA within sixty (60) days describing any changes which must be made to the corrective action program to ensure that the groundwater flow is being adequately controlled.
K. **REQUEST FOR PERMIT MODIFICATION**

1. If the Permittee determines the Corrective Action Monitoring Program no longer satisfies the requirements of 35 Ill. Adm. Code 724.200, the Permittee must, within ninety (90) days, submit an application for a permit modification to the Illinois EPA to make any appropriate changes to the program which will satisfy the regulations.

2. Conditions in this Section of the Permit may be modified in accordance with 35 Ill. Adm. Code 705.128 if there is cause for such modification, as defined in 35 Ill. Adm. Code 702.184. Causes for modification identified in this Section include, but are not limited to, alterations to the permitted facility, additional information which would have justified the application of different permit conditions at the time of issuance, and new regulations.
SECTION IV:
CORRECTIVE ACTION FOR SOLID WASTE MANAGEMENT UNITS

A. INTRODUCTION

1. In accordance with Section 3004(u) of RCRA and 35 Ill. Adm. Code 724.201, the Permittee shall institute such corrective action as necessary to protect human health and the environment from all releases of hazardous wastes or hazardous waste constituents, listed in 35 Ill. Adm. Code 721, Appendix H, from any solid waste management unit (SWMU) at its facility in Tuscola, Illinois. This section contains the conditions which must be followed to ensure these requirements are met.

2. The original RCRA permit for this facility was issued by Illinois EPA on September 30, 1994. Section IV of this permit contained corrective action requirements for eight solid waste management units. The Permittee has completed corrective action at six of these SWMUs and must still conduct corrective action at two units (referred to as the Pond Solids Disposal Area (SWMU 1) and the Leachfield (SWMU 9). This permit contains the requirement for carrying out corrective action at these two units.

3. The Permittee must provide corrective action, as appropriate, for: (1) any newly discovered SWMUs; or (2) future releases for existing SWMUs.

4. The requirements of 35 Ill. Adm. Code 620 and 742 must be met, when applicable, in establishing remediation objectives for corrective action. In addition, all corrective action efforts must meet the requirements of 35 Ill. Adm. Code 724.201.

B. CORRECTIVE ACTION EFFORTS COMPLETED TO DATE

1. A RCRA Facility Investigation (RFI) Phase I Investigation Workplan was approved by Illinois EPA on August 9, 1995. This workplan addressed the following solid waste management units at the facility:

   a. Pond Solids Disposal Area (SWMU 1)

   b. Waste Pile (SWMU 7)

   c. Waste Fertilizer and Plant Trash Landfill (SWMU 8)

   d. Leachfield (SWMU 9)

   e. Railroad Unloading Areas (SWMU 10)

   f. Waste Oil Storage Tank (SWMU 18)
g. Accumulation Tank Systems (SWMU 20)

h. D-Unit Accumulation Area (SWMU 22).

2. Illinois EPA approved an RFI Phase I Report on December 31, 1996. No further action was required for the units listed above, except for the Pond Solids Disposal Area and the Leachfield. The approval letter required that Cabot continue to operate and maintain the leachate collection/removal systems in the Pond Solids Disposal Area and the Leachfield, as was initially required by Condition IV.B.1 of the facility’s RCRA permit issued on September 30, 1994.

3. Cabot has continued to operate and maintain the leachate collection/removal systems at the Pond Solids Disposal Area and the Leachfield in accordance with the December 31, 1996 Illinois EPA letter mentioned in Condition IV.B.2 above.


5. On January 18, 2011, Illinois EPA approved the Pond Solids Disposal Area, Soil Investigation Report dated October 29, 2010 (B-61R-CA-3). It was determined that the soils remaining in the Pond Solids Disposal Area meet 35 Ill. Adm. Code 742, Tier 1 remediation objectives and the appropriate corrective measures is to continue implementation of the leachate management program.


7. On January 18, 2018, Illinois EPA approved additional remediation work at the Pond Solids Disposal area and required Cabot to continue to monitor the soil/vegetative cover for additional low pH areas, and when identified, treat as described in Illinois EPA’s letter dated November 13, 2017.

C. CORRECTIVE ACTION EFFORTS THAT MUST STILL BE COMPLETED

1. A Leachate Management Program must be implemented for the Pond Solids Disposal Area (SWMU 1) and Leachfield (SWMU 9) at the facility as follows:

a. The Permittee must continue to operate, maintain and monitor the leachate collection system at the following SWMUs: The Pond Solids Disposal Area and the Leachfield in accordance with the approved permit application and this permit. On a semi-annual basis, the Permittee must collect a sample of leachate from each unit and analyze it for chlorinated volatile organic compounds using Method 8260B of SW-846. Leachate collects in a sump at each SWMU and then
is pumped directly to the less than 90-day RCRA storage tank. The hazardous waste in the tank is eventually sent to one of Cabot’s permitted Class I Hazardous Waste Underground Injection Control wells.

b. Operation of the leachate collection at a unit may cease when leachate samples for four consecutive semi-annual events meet the Class 2 groundwater remediation objectives in 35 Ill. Admin. Code 742. Once this is achieved, corrective action will be considered complete for that unit and no further action is necessary for that unit.

c. A report describing the leachate management efforts conducted at the Pond Solids Disposal Area and the Leachfield must be submitted to Illinois EPA annually. This report must be submitted to Illinois EPA by March 1 and include the results of the leachate monitoring efforts from the previous calendar year. A completed RCRA Facility Groundwater, Leachate and Gas Reporting form (LPC-592), provided in Attachment A of this permit, must accompany this submittal.

2. The requirements of Condition IV.C.1 above are based upon the expectation that concentrations of contaminants in the leachate will continue to decline at each unit. If this is not the case, then Illinois EPA may require further corrective action, including an alternative or additional corrective measure at this unit, to ensure the requirements of 35 Ill. Admin. Code 742.201 are met.

D. NOTIFICATION REQUIREMENTS FOR AN ASSESSMENT OF NEWLY-IDENTIFIED SOLID WASTE MANAGEMENT UNIT(S)

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

   a. The location of the newly-identified SWMU 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, to the extent available; and

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

2. If the information submitted demonstrates a potential for a release of hazardous waste or hazardous constituents from the newly identified SWMU, the Illinois EPA may request in writing, that the Permittee prepare a Solid Waste Management Unit (SWMU) Assessment Plan and a proposed schedule of implementation and completion of the Plan for any additional SWMU(s). The SWMU Assessment Plan must also propose investigations, including field investigations if necessary, to determine the release potential to specific environmental media for the newly-identified SWMU. The SWMU Assessment Plan must demonstrate that the sampling and analysis program, if applicable, is capable of yielding representative samples and must include parameters sufficient to identify migration of hazardous waste and hazardous constituents from the newly discovered SWMU(s) to the environment.

3. Within ninety (90) calendar days after receipt of the Illinois EPA's request for a SWMU Assessment Plan, the Permittee shall submit a SWMU Assessment Plan.

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

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

6. The Permittee must implement a Corrective Measures Program, as necessary, to properly address any contamination encountered during the assessment. Guidance regarding the implementation of this program will be provided at the time Illinois EPA notifies the Permittee of the need for such a program.
E. FUTURE RELEASES FROM SWMUs

There exists a potential that a release may occur in the future from SWMUs identified in the RCRA Facility Assessment (RFA) 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) calendar days after its discovery following the procedures set forth in Condition IV.D.1 above. Additional investigations and, as necessary, corrective measure efforts at this SWMU must be carried out in accordance with the procedures set forth in Condition IV.F below. The results of all corrective action efforts required by this condition must meet the requirements of 35 Ill. Adm. Code 724.201.

F. INTERIM MEASURES

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

1. Prior to implementing any interim measures, the Permittee must submit detailed information regarding the proposed interim measure to the Illinois EPA for approval. This information shall include, at a minimum:
   a. The objectives of the interim measure, including: how the measure is mitigating a potential threat to human health and the environment; and/or, is consistent with, and integrated into, any long-term solution at the facility;
   b. The design, construction, and maintenance requirements;
   c. A schedule for design and construction; and
   d. A schedule for progress reports.

2. If the Illinois EPA determines that a release cannot be addressed without additional study and/or a formal CMS, then the Illinois EPA will notify the Permittee that these must be performed. Any proposal made under this provision or any other activity resulting from such proposal shall not affect the schedule for implementation of any other portion of the Post-Closure Permit.
3. If the Illinois EPA determines that interim measures are necessary to protect human health or the environment, the Permittee will be notified by way of a permit modification.

G. FINANCIAL ASSURANCE

35 Ill. Adm. Code 724.201 requires that financial assurance be established for completing required corrective actions at solid waste management units:

1. Any corrective action investigation plan or remediation workplan submitted to Illinois EPA for review and approval, must contain a cost estimate for conducting the corrective action required by this section. Within sixty (60) days after these cost estimates are approved, the Permittee shall meet the requirements of 35 Ill. Adm. Code 724.201 and provide financial assurance to Illinois EPA in the amount of the approved cost estimate.

The cost estimate must be supported by a detailed breakdown of the estimated third party cost for completing each required task. The amount of the various resources needed to complete each task must be provided, as well as the unit cost of these resources and an adjustment for contingencies. Justification for all data used in these calculations must also be provided.

2. The main activity associated with completing corrective action at this facility is monitoring the quality of leachate, maintaining the leachate collection system in the Pond Solids Disposal Area and the Leachfield. Cost estimates for these activities are provided as Attachment D of this permit. The required amount of financial assurance for corrective action is $146,300 (2019 dollars).

3. Financial assurance for corrective action must be updated, as necessary, to reflect the current status of the RCRA corrective action program at this facility. This estimate shall be submitted as a Class 1* permit modification request and contain the detailed information in support of the overall cost estimate as required in Condition IV.G.1 above.

5. The financial assurance requirements of 35 Ill. Adm. Code 724.201 must also be met for any investigative or corrective action efforts carried out in accordance with Conditions IV.D or IV.E above. Detailed cost estimates must be developed for any activities carried out under this Section and must accompany any workplan/report submitted to Illinois EPA for review and approval. Appropriate documentation of financial assurance in at least the amount of the approved cost estimate must be submitted to Illinois EPA within sixty (60) days after the cost estimates are approved.
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**

1. Within sixty (60) days of the effective date of this Permit, the Permittee shall submit revised post-closure cost estimates and financial assurance to meet the required minimum ten (10) years post-closure care costs, as stated in Condition II.G.2 as a Class 1* permit modification.

2. The facility must submit revised application pages within sixty (60) days of the effective date of this permit, to reflect the groundwater pumping as a required corrective action, rather than interim, in Section C.8 of the Approved Permit Application, as a Class 1* permit modification.
SECTION VI: STANDARD CONDITIONS FOR POST-CLOSURE CARE

GENERAL REQUIREMENTS

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

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

3. SEVERABILITY. The provisions of this permit are severable, and if any provision of this permit, or the application of any provision of this permit to any circumstance is held invalid, the application of such provision to other circumstances and the remainder of this permit shall not be affected thereby. (35 Ill. Adm. Code 700.107)

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

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

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

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

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

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

10. PROPER OPERATION AND MAINTENANCE. The Permittee shall at all times properly operate and maintain all facilities and systems of treatment and control (and related appurtenances) which are installed or used by the Permittee to achieve compliance with the conditions of this permit. Proper operation and maintenance 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 Ill. Adm. Code 702.145)

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

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

a. Enter at reasonable times upon the Permittee’s premises where a regulated facility or activity is located or conducted, or where records must be kept under the conditions of this permit;

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

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

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

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

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

c. Records of monitoring information shall include:

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

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

iii. The date(s) analyses were performed;

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

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

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

14. REPORTING PLANNED CHANGES. The permittee shall give written notice to the Illinois EPA as soon as possible of any planned physical alterations or additions to the permitted facility. In general, proposed changes to the facility will need to be submitted to the Illinois EPA as permit modification request that complies with the requirements of 35 Ill. Adm. Code 703.280. (35 Ill. Adm. Code 702.152(a))

15. CONSTRUCTION CERTIFICATION. For a new hazardous waste management 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 professional engineer stating that the facility has been constructed or modified in compliance with the permit; and

b. 
   1. The Illinois EPA has inspected the modified or newly constructed facility and finds it is in compliance with the condition of the permit; or
   2. If, within 15 days of the date of submission of the letter in paragraph (a), the permittee has not received notice from the Illinois EPA of its intent to inspect, prior inspection is waived, and the permittee may commence treatment, storage or disposal of hazardous waste. (35 Ill. Adm. Code 703.247)

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

17. TRANSFER OF PERMITS. This permit may not be transferred by the Permittee to a new owner or operator unless the permit has been modified or reissued pursuant to 35 Ill. Adm. Code 703.260(b) or 703.272. Changes in the ownership or operational control of a facility must be made as a Class 1 modification with the prior written approval of the Illinois EPA. The new owner or operator shall submit a revised permit application no later than 90 days prior to the scheduled change. (35 Ill. Adm. Code 703.260)

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

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

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

      i. Information concerning the release of any hazardous waste that may cause an endangerment to public drinking water supplies.
ii. Information concerning the release or discharge of any hazardous waste or of a fire or explosion at the HWM facility, which could threaten the environment or human health outside the facility.

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

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

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

iii. Date, time, and type of incident;

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

v. The extent of injuries, if any;

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

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

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

21. OTHER NONCOMPLIANCE. The Permittee shall report all instances of noncompliance not otherwise required to be reported under Standard Conditions 14, 15, and 16, at the time monitoring reports, as required by this permit, are submitted. The reports shall contain the information listed in Standard Condition 20. (35 Ill. Adm. Code 702.152(g))

22. OTHER INFORMATION. Where the Permittee becomes aware that it failed to submit any relevant facts in the permit application or submitted incorrect information in a permit application or in any report to the Illinois EPA, the Permittee shall promptly submit such facts or information. (35 Ill. Adm. Code 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 shall be sent to:
Illinois Environmental Protection Agency
Bureau of Land #33
Permit Section
1021 North Grand Avenue East
P. O. Box 19276
Springfield, Illinois 62794-9276

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


26. DOCUMENTS TO BE MAINTAINED AT FACILITY SITE. The Permittee shall 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 Ill. Adm. Code 724.218(a) and this permit.

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

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

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

GENERAL FACILITY STANDARDS

27. GENERATOR REQUIREMENTS. Any hazardous waste generated at this facility shall be managed in accordance with the generator requirements at 35 Ill. Adm. Code Part 722.

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

29. GENERAL INSPECTION REQUIREMENTS. The Permittee shall follow the approved inspection schedule. The Permittee shall remedy any deterioration or malfunction discovered by an inspection as required by 35 Ill. Adm. Code 724.115(c). Records of inspections shall be kept as required by 35 Ill. Adm. Code 724.115(d).

30. CLOSURE REQUIREMENTS FOR ACCUMULATION AREAS. The Permittee shall 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 Ill. Adm. Code 722.117(a)(8).
PREPAREDNESS AND PREVENTION

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

RECORD KEEPING

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

POST-CLOSURE

33. CARE AND USE OF PROPERTY. The Permittee shall provide post-closure care for the facility as required by 35 Ill. Adm. Code 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 Ill. Adm. Code 724.218(d).

35. COST ESTIMATE FOR POST-CLOSURE. The Permittee’s original post-closure cost estimate, prepared in accordance with 35 Ill. Adm. Code 724.244, must be:

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

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

   c. Kept on record at the facility and updated. (35 Ill. Adm. Code 724.244)

36. FINANCIAL ASSURANCE FOR POST-CLOSURE CARE. The Permittee shall demonstrate compliance with 35 Ill. Adm. Code 724.245 by providing documentation of financial assurance, as required by 35 Ill. Adm. Code 724.251, in at least the amount of the cost estimates required by the previous Permit Condition. Changes in financial assurance mechanisms must be approved by the Illinois EPA pursuant to 35 Ill. Adm. Code 724.245.

   Financial assurance documents submitted to Illinois EPA should be directed to the following address:
SECTION VII: REPORTING AND NOTIFICATIONS

The reporting and notification requirements of each section of the RCRA permit are summarized below. This summary is provided to highlight the various reporting and notification requirements of this permit.

<table>
<thead>
<tr>
<th>Condition</th>
<th>Submittal</th>
<th>Due Date</th>
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<tbody>
<tr>
<td>SECTION II: POST-CLOSURE CARE</td>
<td></td>
<td></td>
</tr>
<tr>
<td>E.2</td>
<td>Request permit modification to remove the liner or hazardous wastes.</td>
<td>Prior to removing the liner or wastes.</td>
</tr>
<tr>
<td>E.3</td>
<td>Certify to the Illinois EPA that post-closure care was performed in accordance with the specifications.</td>
<td>Within 60 days after completion of the post-closure care period.</td>
</tr>
</tbody>
</table>

SECTION III: GROUNDWATER CORRECTIVE ACTION MONITORING PROGRAM |

<table>
<thead>
<tr>
<th>Condition</th>
<th>Submittal</th>
<th>Due Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>J.2</td>
<td>Groundwater monitoring data</td>
<td>July 15</td>
</tr>
<tr>
<td></td>
<td></td>
<td>January 15</td>
</tr>
<tr>
<td>J.3</td>
<td>Establishing background for new or replacement wells</td>
<td>July 15</td>
</tr>
<tr>
<td></td>
<td></td>
<td>January 15</td>
</tr>
<tr>
<td>J.4</td>
<td>Groundwater surface elevation</td>
<td>July 15</td>
</tr>
<tr>
<td></td>
<td></td>
<td>January 15</td>
</tr>
<tr>
<td>J.6</td>
<td>Groundwater flow rate and direction</td>
<td>July 15</td>
</tr>
<tr>
<td>J.5</td>
<td>Elevation of top well casing.</td>
<td>Every 5 years</td>
</tr>
<tr>
<td>J.6</td>
<td>Elevation of bottom.</td>
<td>Every 5 years</td>
</tr>
<tr>
<td>J.11.a</td>
<td>Notification groundwater is not being adequately controlled</td>
<td>Within 7 days after discovery.</td>
</tr>
<tr>
<td>J.11.c</td>
<td>Submit report describing actions taken to regain control of groundwater flow.</td>
<td>Within 30 days of the determination.</td>
</tr>
<tr>
<td>J.11.d</td>
<td>Request changes to the corrective action program.</td>
<td>Within 60 days</td>
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</tbody>
</table>
**SECTION IV: CORRECTIVE ACTION**

<table>
<thead>
<tr>
<th>Condition</th>
<th>Submittal</th>
<th>Due Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>K.1</td>
<td>Apply to Illinois EPA for permit modification (if monitoring program no longer satisfies regulatory requirements).</td>
<td>Within 90 days after making the determination.</td>
</tr>
<tr>
<td>C.1.c</td>
<td>Leachate Management Report for Pond Solids Disposal Area and Leachfield</td>
<td>March 1 of each year</td>
</tr>
<tr>
<td>D.1</td>
<td>Notify Illinois EPA of newly identified SWMUs</td>
<td>No later than 30 calendar days after discovery.</td>
</tr>
<tr>
<td>E.</td>
<td>Notify Illinois EPA of release from a SWMU</td>
<td>No later than 30 calendar days after discovery.</td>
</tr>
<tr>
<td>G.1</td>
<td>Submit financial assurance</td>
<td>Within 60 days after cost estimates are approved.</td>
</tr>
<tr>
<td>G.3</td>
<td>Update financial assurance</td>
<td>As necessary.</td>
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</tbody>
</table>

**SECTION V: SPECIAL CONDITIONS**

<table>
<thead>
<tr>
<th>Condition</th>
<th>Submittal</th>
<th>Due Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>A.</td>
<td>Submit 39i certification and supporting documentation.</td>
<td>With all applications for a permit.</td>
</tr>
<tr>
<td>B.1</td>
<td>Submit revised post-closure cost estimates and financial assurance</td>
<td>Within 60 days of the effective date of this Permit</td>
</tr>
<tr>
<td>B.2</td>
<td>Submit revised application pages to reflect groundwater pumping as a required corrective action</td>
<td>Within 60 days of the effective date of this Permit</td>
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**SECTION VI: STANDARD CONDITIONS**

<table>
<thead>
<tr>
<th>Condition</th>
<th>Submittal</th>
<th>Due Date</th>
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<tbody>
<tr>
<td>6</td>
<td>Complete application for new permit.</td>
<td>At least 180 days prior to permit expiration.</td>
</tr>
<tr>
<td>11</td>
<td>Information requested by Illinois EPA and copies of records required to be kept by this permit.</td>
<td>Reasonable time.</td>
</tr>
<tr>
<td>14</td>
<td>Notify Illinois EPA of planned physical alterations or additions.</td>
<td>At least 15 days prior to planned change.</td>
</tr>
<tr>
<td>16</td>
<td>Notify Illinois EPA of changes which may result in permit noncompliance.</td>
<td>Within 15 days of change.</td>
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<tr>
<td>Condition</td>
<td>Submittal</td>
<td>Due Date</td>
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<tr>
<td>17</td>
<td>Application for permit modification indicating permit is to be transferred</td>
<td>At least 90 days prior to transfer date.</td>
</tr>
<tr>
<td>19</td>
<td>Submission of any information required in a compliance schedule</td>
<td>Within 14 days after each schedule date.</td>
</tr>
<tr>
<td>20</td>
<td>Report to Illinois EPA any non-compliance which may endanger health or environment; by telephone</td>
<td>Within 24 hours after discovery.</td>
</tr>
<tr>
<td></td>
<td>in writing</td>
<td>Within 5 days after discovery.</td>
</tr>
<tr>
<td>21</td>
<td>Report all other instances of noncompliance.</td>
<td>At the time monitoring reports, as required by this permit, are submitted.</td>
</tr>
<tr>
<td>33</td>
<td>Application for permit modification amending post-closure plan</td>
<td>60 days prior to the proposed change in facility design or operation, or no later than 60 days after an unexpected event has occurred.</td>
</tr>
<tr>
<td>34(a)</td>
<td>Adjust post-closure cost estimate for inflation</td>
<td>Within 30 days after anniversary</td>
</tr>
<tr>
<td>34(b)</td>
<td>Revision of post-closure cost estimate.</td>
<td>As needed.</td>
</tr>
<tr>
<td>35</td>
<td>Change in financial assurance mechanism for post-closure.</td>
<td>As needed.</td>
</tr>
<tr>
<td>36</td>
<td>Notify Illinois EPA of commencement of voluntary or involuntary bankruptcy proceedings.</td>
<td>Within 10 days after commencement of proceeding.</td>
</tr>
</tbody>
</table>
ATTACHMENT A

POINT OF COMPLIANCE DEPICTION

STATE ID # 0418080001

ILD042075333

POST-CLOSURE PERMIT LOG NO. B-61R2
ATTACHMENT B

STATE ID # 0418080001

ILD042075333

POST-CLOSURE PERMIT LOG NO. B-61R2

Groundwater Compliance Monitoring Program Attachments

1. Monitoring Well Diagram

2. IEPA Monitor Well Plugging Procedures

3. Field Boring Log

4. Well Completion Report

5. Groundwater Reporting Forms
Monitoring Well Diagram

- Locking Well Protector
- Well Cap (vented)
- Concrete Cap
- Ground Surface
- Frost Line
- Annular Space Back-Filled with Cement Bentonite Slurry
- Well Casing of Teflon, PVC, S.S. 316, Steel, etc.
- Threaded Joints Sealed with Teflon Tape and/or Inert Gaskets
- Well Casing of Teflon, PVC, or S.S.316 Extending 5 ft Above Groundwater Elevation to Allow for Seasonal Fluctuations
- Saturated Zone
- Bentonite Seal
- Filter Pack of Clean Quartz Sand or Silica Beads
- Well Screen (Teflon, PVC, or S.S.316)
- End Cap

- ≥ 5 ft.
- ≥ 2 ft.
- ≤ 2 ft.
- 5 ft. ≤ L ≤ 10 ft.
# ILLINOIS EPA MONITOR WELL PLUGGING AND ABANDONMENT PROCEDURES

<table>
<thead>
<tr>
<th>Well Construction</th>
<th>Plugging Procedure</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>I. Unconsolidated Sediment Wells</strong></td>
<td></td>
</tr>
<tr>
<td>I-A</td>
<td>...if backfilled with cement grout above bentonite seal and/or sandpack:</td>
</tr>
<tr>
<td></td>
<td>1. Cut casing off at desired depth.</td>
</tr>
<tr>
<td></td>
<td>2. Mix neat cement slurry (5 gal. water per 94 lb. bag cement).</td>
</tr>
<tr>
<td></td>
<td>3. Insert tremi pipe (1&quot; i.d. pvc) into well and extend to bottom.</td>
</tr>
<tr>
<td></td>
<td>4. Slowly pump slurry under low pressure through tremi pipe.</td>
</tr>
<tr>
<td></td>
<td>5. Slowly withdraw tremi pipe - making sure bottom of pipe remains below pure slurry.</td>
</tr>
<tr>
<td></td>
<td>6. Continue slow pumping until all formation water and the watery slurry mix is displaced from top of casing.</td>
</tr>
</tbody>
</table>

| I-B | ...if backfilled with soft sediments (cuttings) above bentonite seal and/or sandpack: |
| | 1. Knock out and remove thin surface concrete plug, if present. |
| | 2. Re-auger entire length of well. |
| | 3. Remove well casing from re-augured borehole. |
| | 4. Mix neat cement slurry (5 gal. water per 94 lb. bag cement). |
| | 5. Insert tremi pipe (1" i.d. pvc) into augers and extend to bottom. |
| | 6. Slowly pump slurry under low pressure through tremi pipe. |
| | 7. Continue slow pumping until all formation water and the water slurry mix is displaced from top of casing. |
| | 8. Slowly withdraw tremi pipe - making sure bottom of pipe remains below pure slurry. |
| | 9. Pull a flight of augers (5" if in unstable materials and hole collapse is likely or 10" if in competent material and collapse is unlikely). |
| | 10. Top off cement slurry after each flight is removed. |
| I-C | ...if monitor well construction is unknown: |
| | 1. Follow procedures in I-A. |

| II. Bedrock Wells | |
|-------------------| |
| II-A | ...All bedrock monitor wells: |
| | 1. Cut casing off at desired depth. |
| | 2. Mix neat cement slurry (5 gal. water per 94 lb. bag cement). |
| | 3. Insert tremi-pipe (1" i.d. pvc) into well and extend to bottom. |
| | 4. Slowly pump slurry under low pressure through tremi pipe. |
| | 5. Slowly withdraw pipe making sure bottom of pipe remains below pure slurry. |
| | 6. Continue slow pumping until all formation water and the watery slurry mix is displaced from top of casing. |
 Illinois Environmental Protection Agency

Site File No. ___________________ Federal ID No. ___________________
Site File Name: ___________________
Quadrangle: _______________ Sec. __________ T. __________ R. ___________
UTM (or State Plane) Coord. N: (X) __________ E: (Y) __________
Latitude: ____________ ° ____________ Longitude: ____________ ° ____________
Drilling Location: ___________________
Drilling Equipment: ___________________

<table>
<thead>
<tr>
<th>Elev.</th>
<th>Description of Material</th>
<th>Remarks</th>
</tr>
</thead>
</table>

Field Boring Log

County: ___________________
Boring No. ___________ Monitoring Well No.: ___________
Surface Elevation: _______ Completion Depth: _______
Auger Depth: ___________ Rotary Depth: ___________
Date: Start ___________ Finish: ___________

<table>
<thead>
<tr>
<th>SAMPLES</th>
<th>Personnel</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sample No.</td>
<td>Sample Type</td>
</tr>
<tr>
<td>___________</td>
<td>___________</td>
</tr>
</tbody>
</table>
Illinois Environmental Protection Agency

Well Completion Report

Site Number: ____________________________  County: ____________________________

Site Name: ____________________________  Well #: ____________________________

State: ____________________________  IL Registration #: ____________________________

Plane Coordinate: X Y (or) Latitude: ° ' "  Longitude: ° ' "  Borehole #: ____________________________

Surveyed by: ____________________________  Driller: ____________________________

Drilling Contractor: ____________________________  Geologist: ____________________________

Consulting Firm: ____________________________  Drilling Fluid (Type): ____________________________

Drilling Method: ____________________________  Date Started: __________  Date Finished: __________

Logged By: ____________________________  Date: ____________________________

Report Form

Completed By: ____________________________

ANNULAR SPACE DETAILS

Type of Surface Seal: ____________________________

Type of Annular Sealant: ____________________________

Installation Method: ____________________________

Setting Time: ____________________________

Type of Bentonite Seal – Granular, Pellet, Slurry (Choose One)

Installation Method: ____________________________

Setting Time: ____________________________

Type of Sand Pack: ____________________________

Grain Size: ____________________________ (Sieve Size)

Installation Method: ____________________________

Type of Backfill Material: ____________________________

Installation Method: ____________________________

WELL CONSTRUCTION MATERIAL

(Choose one type of material for each area)

Protective Casing  SS304, SS316, PTFE, PVC, or Other

Riser Pipe Above W.T.  SS304, SS316, PTFE, PVC, or Other

River Pipe Below W.T.  SS304, SS316, PTFE, PVC, or Other

Screen  SS304, SS316, PTFE, PVC, or Other

Well Completion Form (revised 11/21/2011)

Elevations (MSL)*

Depth (BGS) (.01ft.)

Top of Protective Casing

Top of Riser Pipe

Ground Surface

Top of Annular Sealant

Static Water Level (After Completion)

Top of Seal

Top of Sand Pack

Top of Screen

Bottom of Screen

Bottom of Well

Bottom of Borehole

* Referenced to a National Geodetic Datum

CASING MEASUREMENTS

Diameter of Borehole (inches)

ID of Riser Pipe (inches)

Protective Casing Length (feet)

Riser Pipe Length (feet)

Bottom of Screen to End Cap (feet)

Screen Length (1" slot to last slot) (feet)

Total Length of Casing (feet)

Screen Slot Size**

**Hand-Slotted Well Screens are Unacceptable
RCRA FACILITY GROUNDWATER, LEACHATE AND GAS REPORTING FORM

This form must be used as a cover sheet for the notices and reports, identified below as required by: (1) a facility's RCRA interim status closure plan; (2) the RCRA interim status regulations; or (3) a facility's RCRA permit. All reports must be submitted to the Illinois EPA's Bureau of Land Permit Section.  This form is for use by Hazardous Waste facilities only. Reporting for Solid Waste facilities should be submitted on a separate form. All reports submitted to the Illinois EPA's Bureau of Land Permit Section must contain an original, plus a minimum of two copies.

Note: This form is not to be used with permit or closure plan modification requests. The facility's approved permit or closure plan will state whether the document you are submitting is required as a report or a modification request.

Facility Name: ___________________________  Site ID #: ___________________________
Facility Address: ___________________________  Fed ID #: ___________________________

Check the appropriate heading. Only one heading may be checked for each corresponding submittal. Check the appropriate sub-heading, where applicable. Attach the original and all copies behind this form.

<table>
<thead>
<tr>
<th>LPC-160 Forms</th>
<th>Leachate</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Groundwater</td>
</tr>
<tr>
<td></td>
<td>Quarterly – Indicate one: 1 2 3 4</td>
</tr>
<tr>
<td></td>
<td>Semi-Annual</td>
</tr>
<tr>
<td></td>
<td>Annual</td>
</tr>
<tr>
<td></td>
<td>Biennial</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th></th>
<th>Groundwater Data (without LPC-160 Forms)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Quarterly – Indicate one: 1 2 3 4</td>
</tr>
<tr>
<td></td>
<td>Semi-Annual</td>
</tr>
<tr>
<td></td>
<td>Annual</td>
</tr>
<tr>
<td></td>
<td>Biennial</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th></th>
<th>Well Construction Information</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Well Construction Forms, Boring Logs and/or Abandonment Forms</td>
</tr>
<tr>
<td></td>
<td>Well Survey Data (e.g., Stick-up Elevation Data)</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th></th>
<th>Notice of Statistically Significant Evidence of Groundwater Contamination</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>(35 Ill. Adm. Code 724.198)</td>
</tr>
</tbody>
</table>

|------------------------|----------------------------------------------------------------------------------------|

<table>
<thead>
<tr>
<th></th>
<th>Notice of Alternate Source or Error in Sampling Analysis or Evaluation of Groundwater (35 Ill. Adm. Code 724.199(i))</th>
</tr>
</thead>
</table>

<table>
<thead>
<tr>
<th></th>
<th>Gas Monitoring Reports</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Other (identify)</td>
</tr>
</tbody>
</table>

IL 532-2675
LPC 592  5/2000  0418080001-B61RM7-B61RM8-B61RMS-Approval.docx
Formatting Requirements for the 01 Record of the Electronically Submitted Groundwater and Leachate Data (the 01 Record portion of the LPC-160 is included for example purposes)

### ILLINOIS ENVIRONMENTAL PROTECTION AGENCY
### DIVISION OF LAND POLLUTION CONTROL
### CHEMICAL ANALYSIS FORM

<table>
<thead>
<tr>
<th>RECORD CODE</th>
<th>TRANS CODE</th>
</tr>
</thead>
<tbody>
<tr>
<td>L P C S M 0 1</td>
<td>A</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>REPORT DUE DATE</th>
</tr>
</thead>
<tbody>
<tr>
<td>36 M D Y 41</td>
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</table>

FEDERAL ID NUMBER __________

<table>
<thead>
<tr>
<th>SITE INVENTORY NUMBER</th>
<th>MONITOR POINT NUMBER</th>
<th>DATE COLLECTED</th>
</tr>
</thead>
<tbody>
<tr>
<td>9</td>
<td>18</td>
<td>23 M D Y 28</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>REGION</th>
<th>CO.</th>
<th>DATE COLLECTED</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>23 M D Y 28</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>FACILITY NAME</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
</tr>
</tbody>
</table>

**FOR IEPA USE ONLY**

<table>
<thead>
<tr>
<th>LAB</th>
<th>DATE RECEIVED</th>
</tr>
</thead>
<tbody>
<tr>
<td>29</td>
<td>42 M D Y 47</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>BACKGROUND SAMPLE (X)</th>
<th>TIME COLLECTED (24 Hr. Clock)</th>
</tr>
</thead>
<tbody>
<tr>
<td>54</td>
<td>55 11 M 58</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>UNABLE TO COLLECT SAMPLE</th>
<th>MONITOR POINT SAMPLED BY</th>
</tr>
</thead>
<tbody>
<tr>
<td>59</td>
<td>(see Instructions)</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>SAMPLE FIELD FILTERED - INORGANICS (X)</th>
<th>ORGANICS (X)</th>
</tr>
</thead>
<tbody>
<tr>
<td>61</td>
<td>62</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>SAMPLE APPEARANCE</th>
<th>COLLECTOR COMMENTS</th>
<th>LAB COMMENTS</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>150</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>OTHER (SPECIFY)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
</tr>
</tbody>
</table>

This Agency is authorized to require this information under Illinois Revised Statutes, 1979, Chapter 111 1/2, Section 1004 and 1021. Disclosure of this information is required. Failure to do so may result in a civil penalty up to $25,000 for each day the failure continues and fine up to $1,000.00 and imprisonment up to one year. This form has been approved by the Forms Management Center.

All analytical procedures must be performed in accordance with the methods contained in “Test Methods for Evaluating Solid Wastes, Physical Chemical Methods,” SW-846, 3rd Edition, September 1986 or equivalent methods approved by the Agency. Proper sample chain of custody control and quality assurance/quality control procedures must be maintained in accordance with the facility sampling and analysis plan.

*Only Key punch with Data in Column 35 or Columns 38-47
**KEY:**

<table>
<thead>
<tr>
<th>Spaces Numbered</th>
<th>Description</th>
<th>Format</th>
</tr>
</thead>
<tbody>
<tr>
<td>Spaces 1-7</td>
<td>Record Code</td>
<td>LPCSM01</td>
</tr>
<tr>
<td>Space 8</td>
<td>Trans Code</td>
<td>A</td>
</tr>
<tr>
<td>Spaces 9-18</td>
<td>Site ID</td>
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</tr>
<tr>
<td>Spaces 19-22</td>
<td>Mon Pt ID</td>
<td>G000</td>
</tr>
<tr>
<td>Spaces 23-28</td>
<td>Date Collected</td>
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</tr>
<tr>
<td>Space 29</td>
<td>Lab</td>
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<td>Spaces 30-35</td>
<td>Filler</td>
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<td>Spaces 36-41</td>
<td>Report Due Date</td>
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<td>Spaces 42-47</td>
<td>Date Received</td>
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<td>Spaces 48-53</td>
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<td>Background Sample</td>
<td></td>
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<td>Spaces 55-58</td>
<td>Time Collected</td>
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</tr>
<tr>
<td>Space 59</td>
<td>Unable to Collect Sample</td>
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<tr>
<td>Space 60</td>
<td>Monitoring Point Sampled By</td>
<td></td>
</tr>
<tr>
<td>Space 61</td>
<td>Field Filtered – Inorganic</td>
<td></td>
</tr>
<tr>
<td>Space 62</td>
<td>Field Filtered – Organic</td>
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<tr>
<td>Spaces 63-102</td>
<td>Sample Appearance</td>
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</tr>
<tr>
<td>Spaces 103-142</td>
<td>Collector Comments</td>
<td></td>
</tr>
<tr>
<td>Spaces 143-149</td>
<td>Filler 3</td>
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</tr>
<tr>
<td>Spaces 150-159</td>
<td>Lab Comments</td>
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</tr>
</tbody>
</table>
### Formatting Requirements for the 02 Record of the Electronically Submitted Groundwater and Leachate Data (the 02 Record portion of the LPC-160 is included for example purposes)

**RECORD CODE** | 1 | P | C | S | M | 0 | 2 | **TRANS CODE** | A | (COLUMNS 9-29 FROM ABOVE)
---|---|---|---|---|---|---|---|---|---|---

**FIELD MEASUREMENTS**  
CONSTITUENT DESCRIPTION AND REQUIRED UNIT OF MEASURE | STORET NUMBER | Remarks | Replicate | < or > | Value
---|---|---|---|---|---
Q TEMP OF WATER (unfiltered °F) | 0 0 0 1 1 30 34 35 36 37 38 | | | | 47
Q SPEC COND (unfiltered umhos) | 0 0 0 9 4 | | | | |
Q pH (unfiltered units) | 0 0 4 0 0 | | | | |
Q ELEV OF GW SURF (ft ref MSL) | 7 1 9 3 | | | | |
Q DEPTH OF WATER (ft below LS) | 2 2 0 1 9 | | | | |
A BTM WELL ELEV (ft ref MSL) | 7 2 0 2 0 | | | | |
Q DEPTH TO WATER FR MEA PT (ft) | 7 2 1 0 9 | | | | |

**KEY:**  
*Only Keypunch with Data in Column 35 or Columns 38-47*

**Spaces Numbered**  
Spaces 1-7  
Space 8  
Spaces 9-18  
Spaces 19-22  
Spaces 23-28  
Space 29  
Spaces 30-34  
Space 35  
Space 36  
Space 37  
Spaces 38-47

**Description**  
Record Code  
Trans Code  
Site ID  
Mon Pt ID  
Date Collected  
Lab  
STOREET Number  
Remarks  
Replicate  
< or >  
Value

**Format**  
LPCSM02  
A  
0000000000
ATTACHMENT C

APPROVED PERMIT APPLICATION IDENTIFICATION

STATE ID # 0418080001

ILD042075333

POST-CLOSURE PERMIT LOG NO. B-61R2
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:

<table>
<thead>
<tr>
<th>Document</th>
<th>Date</th>
<th>Date Received</th>
</tr>
</thead>
<tbody>
<tr>
<td>RCRA Permit Application (this application completely replaced the initial application dated April 15, 2019)</td>
<td>11/08/19</td>
<td>11/12/19</td>
</tr>
<tr>
<td>ADDITIONAL INFORMATION</td>
<td>12/20/19</td>
<td>12/23/19</td>
</tr>
<tr>
<td>ADDITIONAL INFORMATION</td>
<td>2/14/20</td>
<td>2/18/20</td>
</tr>
<tr>
<td>ADDITIONAL INFORMATION</td>
<td>5/12/20</td>
<td>5/13/20</td>
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<tr>
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<td>5/18/20</td>
<td>5/18/20</td>
</tr>
<tr>
<td>ADDITIONAL INFORMATION</td>
<td>5/21/20</td>
<td>5/21/20</td>
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</tbody>
</table>
ATTACHMENT D
CORRECTIVE ACTION AND POST CLOSURE CARE
COST ESTIMATE SUMMARY
STATE ID # 0418080001
ILD042075333
POST-CLOSURE PERMIT LOG No. B-61R2
CORRECTIVE ACTION AND POST-CLOSURE CARE

COST ESTIMATE SUMMARY

Cabot Corporation

These estimates are based on using 2019 dollars and include the cost of: (1) activities carried out each year (i.e., annual costs); and (2) one-time or non-annual costs.

<table>
<thead>
<tr>
<th>ACTIVITY</th>
<th>COST ESTIMATES</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Annual Cost Per Year</td>
</tr>
<tr>
<td>Corrective Action</td>
<td>$22,105</td>
</tr>
<tr>
<td>Post Closure Care</td>
<td>$166,258</td>
</tr>
<tr>
<td>TOTAL</td>
<td></td>
</tr>
</tbody>
</table>

Notes:
Total Annual Costs = Annual Cost per Yr. x # of years remaining in PCC (in this case 6 years).

10% Contingency applied
ATTACHMENT E

FACILITY MAPS

STATE ID # 0418080001

ILD042075333

POST-CLOSURE PERMIT LOG No. B-61R2