

## I Closure

### I.1 Closure Plan [40 CFR 270.14(b)(13); 264.112(a)(1),(2)]

Closure was completed for the regulated unit (landfill) at the facility in 1988; therefore, this regulatory standard does not apply. A closure certification report was submitted to the Georgia EPD (Phase I Environmental Audit [EA]; CH2M 2005). A copy of the closure certification report including the closure plan is in Appendix C.

#### I.1.1 Closure Report

The landfill (SWMU 1) was closed under a Georgia EPD-approved closure plan in 1988 (Phase I EA; CH2M 2005), which is included as Appendix C.

### I.2 Post-Closure Plan [40 CFR 270.14(b)(13)]

This post-closure plan describes the activities that will continue being performed to manage the closed landfill throughout the post-closure care period in accordance with 40 CFR 264.117, 118, and 310. This plan describes the groundwater monitoring, inspection, and maintenance activities.

Maintenance of the closed landfill will include the following:

- Maintenance and Repair of Landfill Cover – The cover will be inspected at the frequencies outlined in Table 14 to check for erosion, subsidence in the cover due to differential settlement in the landfill, or other factors that may adversely affect the function of the cover. Grass has been planted on the cover to provide erosion control and is mowed as often as necessary to maintain a grass height sufficient to allow inspection of the landfill covers. In addition, periodic seeding and erosion repair will be performed if needed to maintain the soil and vegetation areas. Any major subsidence because of differential settlement of the landfill cover system will be repaired under the supervision of a professional engineer.
- Run-on/Runoff Control System – Drainage swales will be inspected at the frequency outlined in Table 15. Ditches will be repaired as needed for erosion and seeded when necessary to maintain grass cover.
- Groundwater Monitoring System – Groundwater monitoring wells will be inspected at the frequency outlined in Table 14 to verify that visible portions of the wells are maintained.
- Additional Considerations – Fencing and gates around the landfill area will be repaired as necessary to control access to the closed landfill area. Warning signs will be maintained at the gates and along the fence line as described in Section F.1a(3).

Inspection details are provided in Sections F.2 and F.2a. Examples of post-closure care inspection forms are included in Appendix H. UCC will maintain post-closure care inspection records throughout the post-closure care period.

40 CFR 270.14(b)(13) lists several regulations that do not have standards that are applicable to the facility these are described in the following table.

## Post-Closure Care and Corrective Action Permit HW-063(D) Renewal Application

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40 CFR Citation	Rationale
264.112 (b) – (e),	These regulations do not apply because the facility has completed closure. The closure plan and closure certification are attached in Appendix C.
264.118(b)(4)	Alternative requirements have not been applied to this facility.
264.197	This section applies to tank systems. No tank systems are present at the facility.
264.178	This section applies to container storage units. No container storage units are at the facility.
264.228,	This section applies to surface impoundments. No surface impoundments are at the facility.
264.258,	This section applies to waste piles. No waste piles are at the facility.
264.280,	This section applies to land treatment units. No land treatment units are at the facility.
264.351,	This section applies to incinerators. No incinerators are present at the facility.
264.601 and 603	This section applies to miscellaneous units. No miscellaneous units are at the facility.

### I.2g Post-Closure Care Contact [40 CFR 270.14(b)(13); 264.118(b)(3)]

For information regarding the hazardous waste disposal unit during post-closure care, please use the following contact information:

Contact Name: Meredith Harris  
Title: Remediation Leader  
Mailing Address: 2301 Brazosport Blvd B-122  
City: Freeport State: Texas Zip: 77541  
Contact Telephone: +1 (936) 548-9341

### I.3ad Notices Required for Disposal Facilities [40 CFR 270.14(b)(14)]

All notices required for disposal facilities by 40 CFR 270.14(b)(14) have been filed and submitted appropriately.

#### I.3ad.1 Certification of Closure [40 CFR 264.115]

A report, "Closure Certification for Hazardous Waste Landfill Closure" dated July 13, 1988, was submitted to Georgia EPD to certify closure of the regulated unit (landfill). A copy of this report is attached as Appendix C.

#### I.3ad.2 Survey Plat [40 CFR 264.116]

A survey plat of the former landfill is on file with the local zoning authority and Georgia EPD. A copy is included in the executed deed notice in Appendix I.

#### I.3ad.5 Deed notice [40 CFR 264.119]

In accordance with 40 CFR 264.119, UCC submitted notification to the local zoning authority indicating the location and dimensions of the former landfill and estimated quantity of hazardous wastes present in each cell. In addition, the deed to the property where the closed landfill is located was amended in Camden County deed book, 262, page 227, with a notation that the land has been used to manage hazardous waste. A revised survey plat of the former landfill is on file with the local zoning authority and Georgia EPD. A copy of the notice in the deed to the property and the revised survey plat is presented in Appendix I. Furthermore, the environmental covenant, prepared in accordance with the Georgia Uniform Environmental Covenants Act, O.C.G.A., Section 44-16-1 et seq. was executed on January 27, 2011, and is presented in Appendix I. The environmental covenant subjects the landfill and buffer zone to the use limitations. The use limitations include that it shall be used only for non-residential uses and the use or

extraction of groundwater beneath the area including the RCRA landfill for drinking water or for any other non-remedial purposes shall be prohibited.

**I.3ad.3 Post-Closure Certification [40 CFR 264.120]**

A post-closure certification in accordance with 40 CFR 264.120 will be submitted following completion of post-closure care activities.

**I.4 [Not Assigned]**

Not applicable.

**I.5 [Not Assigned]**

Not applicable.

**I.6 Post-Closure and Corrective Action Cost Estimate [40 CFR 270.14(b)(16); 264.144; 264.101; OCGA 12-8-68; GA HWM Rule 391-3-11-.05]**

The cost estimate reflects costs, in current year dollars, of the post-closure care, corrective action, and contingency actions outlined in this permit application. This includes the following post-closure care tasks:

- Maintenance of the landfill cap including:
  - Inspections performed quarterly and after major storms
  - Landscaping and minor repairs
  - Compliance monitoring for groundwater
  - Annual reporting
- Maintenance of the Todd Creek Bank Stabilization measures including:
  - Inspections performed after major storms, quarterly for one year, and annually thereafter if approved by Georgia EPD (as detailed in Section E.9d.1.3.2.2)
  - Landscaping and minor maintenance

The total costs for performing periodic tasks over the post-closure care period were calculated by multiplying the annual cost in current dollars by the total number of years. The post-closure care period was assumed to be 30 years.

The total cost for currently known corrective action tasks was included in the estimate. This includes the following corrective action tasks:

- The corrective action for the Drum Removal Area as detailed in the corrective action plan included in Appendix M.
- Completing the corrective action and implementing institutional controls for munitions and explosives of concern (MEC) with SWMUs 8 and 9 as detailed in Appendix D.
- The total cost for a 1-year study of the effects of the iSOC system, including quarterly sample collection and analysis with a report.
- A factor of 10% has been applied for annual operation and maintenance of the iSOC system following the 1-year study (these costs will be removed if operation of the iSOC is discontinued)
- Decommissioning the iSOC system upon approval from EPD

- Abandonment of all monitoring wells upon approval from EPD

The costs for contingency actions that will be implemented under certain circumstances were included in the estimate as well. The contingency projects included the implementation of additional Todd Creek stabilization measures and the contingency remedy for groundwater at the landfill. These costs were adjusted with a factor to account for the likelihood that the action will be implemented. The factors of 25% for the Todd Creek contingency and 10% for the landfill groundwater contingency that were agreed to in the 2011 RCRA permit were carried forward into this estimate. The cost estimate is included in Appendix J.

**I.7 Financial Assurance Mechanism for Post-Closure Care and/or Corrective Action [40 CFR 270.14(b)(16); 264.146; 264.151; 264.101; OCGA 12-8-68; GA HWM Rule 391-3-11-.05]**

Financial assurance documentation will be provided to Georgia EPD when the renewed permit is issued.

**I.8 [Not Assigned]**

Not applicable.

**I.9 Use of State-Required Mechanisms [40 CFR 270.14(b)(18); 264.149; OCGA 12-8-68; GA HWM Rule 391-3-11-.05]**

UCC does not require a state financial mechanism for this facility; therefore, this section is not applicable.

**I.9b State Assumption of Responsibility [40 CFR 270.14(b)(18); 264.150]**

The state has not assumed responsibility for the facility; therefore, this section is not applicable.

## J Characterization of the Solid Waste Management Units

### J.1 Characterization of Solid Waste Management Units and Areas of Concern [40 CFR 270.14(d)(1); 264.101]

The following subsections summarize each identified SWMU. Figure 2 is a map of the facility depicting all SWMUs. Characterization results, remedial action details, and information regarding releases are in the historical reports included as Appendix K.

Six SWMUs at the facility have been closed with No Further Action (NFA) status (Georgia EPD 2017). The following table summarizes proposed status changes for the SWMUs.

SWMU or AOC	From 2017 HW-063(D) Permit					Proposed Status Updates
	40 CFR 264.90(a)(2) Regulated Unit?	RFI Required?	RFI Complete?	Corrective Action Required?	No Further Action	
SWMU 1 A – Munitions Debris Area	No	Yes	Yes	U	No	Requesting NFA status change to “Yes” and Corrective Action Required to “No”. See Section J.1.2 and Phase III MEC RFI (CH2M 2018a).
SWMU 1 – Closed Landfill	Yes	Yes	Yes	Yes	No	No change
SWMU 2 – Surface Storage of Empty Drums	No	Yes	Yes	No	Yes	No change
SWMU 3 – Buried CS Trench and Surface Debris Area, Aldicarb Disposal Area	No	Yes	Yes	No	Yes	No change
SWMU 4 – Acetone Evaporation Pond and Borrow Pit	No	Yes	Yes	No	Yes	No change
SWMU 5 – Disposal Trench	No	Yes	Yes	No	Yes	No change
SWMU 6 – Surface Disposal Area, Trench Area 1, Trench Area 2, Borrow Pit	No	Yes	Yes	No	Yes	No change
SWMU 7 – Surface Disposal Area	No	Yes	Yes	No	Yes	No change
SWMU 8 – 2015 MEC/MC Disposal Area 1	No	Yes	Yes	Yes	No	Requesting update of “RFI Complete?” to “Yes”, and “Corrective Action Required?” to “Yes”. Completed and ongoing corrective actions are detailed in Section J.1.9.
SWMU 9 – 2015 MEC/MC Disposal Area 2	No	Yes	Yes	Yes	No	No change

Note:

U – Undetermined