

US EPA ARCHIVE DOCUMENT



# HAZARDOUS WASTE FACILITY PERMIT

**ISSUED TO:** Chemical Waste Management, Inc.

**EPA ID/PERMIT NUMBER:** ALD 000 622 464

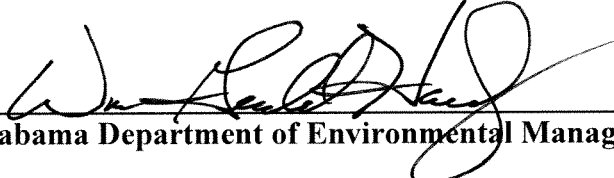
**LOCATION:** Alabama Highway 17 North  
Mile Marker 163  
Emelle, Alabama

**UNITS PERMITTED:** Storage in containers  
Storage in tanks  
Storage in containment buildings  
Treatment in containers  
Treatment in tanks  
Treatment in containment buildings  
Treatment in miscellaneous units  
Disposal in landfills  
Post-Closure Care

**ISSUANCE DATE:** September 16, 2010

**EXPIRATION DATE:** September 15, 2015

*This Permit is issued pursuant with the Code of Alabama 1975, §§ 22-30-1-et. seq., as amended, and regulations adopted thereunder and the Hazardous Wastes Management and Minimization Act and in accordance with the plans and specifications and applications filed with the Department subject to the conditions appended hereto, all of which are considered a part of this Permit. This Permit shall be subject to all applicable laws of the State of Alabama, rules and regulations and orders of the Department of Environmental Management and shall be effective from the date of issuance.*

  
Alabama Department of Environmental Management

ALABAMA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT  
HAZARDOUS WASTE PERMIT

Permittee:

OWNER:  
Chemical Waste Management, Inc.  
Highway 17 North, Mile Marker 163  
Emelle, Alabama 35459  
Sumter

Permit Number:

ALD 000 622 464

Identification Number:

ALD 000 622 464

OPERATOR:

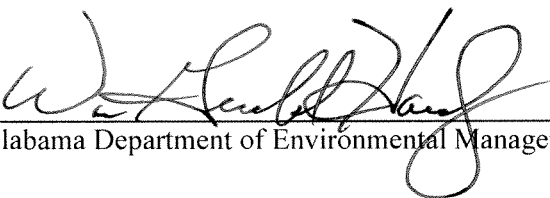
Waste Management  
1001 Fanning Suite 4000  
Houston, Texas 77002  
Harris

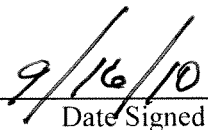
Pursuant to the Alabama Hazardous Wastes Management and Minimization Act (AHWMMA), Code of Ala. 1975, Section 22-30-1, et. seq., as amended, and attendant regulations promulgated thereunder by the Alabama Department of Environmental Management (ADEM or the Department), a permit is issued to Chemical Waste Management, Inc. (hereinafter called the Permittee) for the facility located in Emelle, Alabama, at latitude N32° 47' 30" and longitude W88° 18' 45".

The Permittee must comply with all terms and conditions of this permit, which consists of the conditions set forth herein (including those in any attachments), and the regulations applicable to the Permittee's facility contained in Chapters 335-14-1, 335-14-2, 335-14-5, 335-14-8, and 335-14-9 of the ADEM Administrative Code of Regulations (hereinafter referred to as the "ADEM Admin. Code Rule"). Applicable regulations are those which are in effect on the date of issuance of this permit.

This permit is based on the assumption that the information submitted in the permit application attached to the Permittee's letter dated May 11, 2009, as modified by subsequent amendments dated December 3, 2009, and June 21, 2010 (hereby incorporated by reference and hereafter referred to as the Application) is accurate and that the facility will be constructed and operated as specified in the Application. Any inaccuracies found in this information could lead to the termination or modification of this permit in accordance with ADEM Admin. Code Rules 335-14-8-.04(2), 335-14-8-.04(3), and 335-14-8-.04(4) and could lead to potential enforcement action. The Permittee must inform ADEM of any deviation from or changes in the information provided in the Application that would affect the Permittee's ability to comply with the applicable regulations or permit conditions.

This permit is effective as of September 16, 2010 and shall remain in effect until September 15, 2015 unless revoked and reissued, or terminated under ADEM Admin. Code Rules 335-14-8-.04(2) and 335-14-8-.04(4) or continued in accordance with ADEM Admin. Code Rule 335-14-8-.05(2).

  
Alabama Department of Environmental Management

  
Date Signed

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**Documents Incorporated By Reference:**

Part A and Part B Permit Application submitted on May 11, 2009 (identified as Revision 3.0), as modified by subsequent amendments dated December 3, 2009, and June 21, 2010 comprised of twenty-one (21) volumes labeled Volume 1 through Volume 21.

**PART I****STANDARD FACILITY CONDITIONS****I.A. EFFECT OF PERMIT**

Issuance of this permit does not authorize any injury to persons or property, any invasion of other private rights, or any infringement of state or local law or regulations.

Compliance with the terms of this permit does not constitute a defense to any action brought under the AHWMMMA, or any other law governing protection of public health or the environment, for any imminent and substantial endangerment to human health, welfare, or the environment.

**I.B. 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.

**I.C. DUTIES AND REQUIREMENTS****1. Duty to Comply**

The Permittee shall comply with all conditions of this permit, except to the extent and for the duration such noncompliance is authorized by an emergency permit.

Any permit noncompliance, other than noncompliance authorized by an emergency permit, constitutes a violation of the AHWMMMA, and is grounds for enforcement action, permit termination, revocation and reissuance, modification, or denial of a permit renewal application.

**2. Duty to Reapply**

a. If the permittee wishes to continue an activity regulated by this permit after the expiration date of this permit, the permittee must apply for and obtain a new permit.

b. The Permittee must submit an application for a new permit for both post-closure and Solid Waste Management Unit (SWMU) corrective action at least 180 calendar days before the expiration of this permit. The Permittee must reapply in order to fulfill the 30-year post-closure care period required by ADEM Admin. Code Rule 335-14-5-.07(8)(a)1. The Department may shorten or extend the post-closure care period applicable to the hazardous waste facility in accordance with ADEM Admin. Code Rules 335-14-5-.07(8)(a)2. and 335-14-8-.03(1)(b).

**3. 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.

4. Duty to Mitigate

In the event of noncompliance with this 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.

5. Proper Operation and Maintenance

The Permittee shall, at all times, properly operate and maintain all facilities and systems of treatment, monitoring, 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 (O&M) includes 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 backup or auxiliary facilities or similar systems only when necessary to achieve compliance with the conditions of this permit.

6. Permit Actions

This permit may be modified, revoked and reissued, or terminated for cause as specified in ADEM Admin. Code Rules 335-14-8-.04(2), 335-14-8-.04(3) and 335-14-8-.04(4). The filing of a request for a permit modification, revocation and reissuance, or termination, or the notification of planned changes or anticipated noncompliance on the part of the Permittee does not stay any permit condition.

7. Property Rights

Issuance of this permit does not convey any property rights of any sort, nor any exclusive privilege.

8. Duty to Provide Information

The Permittee shall furnish to the Department, within a reasonable time as determined by the Department, any relevant information which the Department 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 Department, upon request, copies of records required to be kept by this permit.

9. Inspection and Entry

The Permittee shall allow duly designated officers and employees of the Department, or an authorized representative, 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 AHWMMMA, any substances or parameters at any location. The Permittee shall have the opportunity to split samples during sampling.

10. Monitoring and Records

- 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 to be analyzed must be the appropriate method from ADEM Admin. Code Rule 335-14-2-Appendix I or the methods specified in Section C-2-5, Appendix C-1 of the permit application. Laboratory methods must be those specified in Test Methods for Evaluating Solid Waste: Physical/Chemical Methods SW-846 (latest edition), Methods for Chemical Analysis of Water and Wastes (EPA-600/4-79-020), Standard Methods for the Examination of Water and Wastewater (latest edition), the methods specified in Section C, Appendix C-1 of the permit application, or an alternative method approved by ADEM. [ADEM Admin. Code Rules 335-14-8-.03(1)(j)1.]
- b. The Permittee shall maintain at the facility records of all monitoring information, including all calibration and maintenance records, records of all data used to prepare documents required by this permit, copies of all reports required by this permit, and records of all data used to complete the application for this permit for a period of at least three (3) years from the date of the sample, measurement, report or record, or until corrective action is completed, whichever date is later. This period may be extended by the Department at any time and is automatically extended during the course of any unresolved enforcement action regarding this facility. [ADEM Admin. Code Rules 335-14-5-.05(5)(b) and 335-14-8-.03(1)(j)2.]
- c. The Permittee shall maintain at the facility records for all groundwater monitoring wells and piezometers and associated groundwater surface elevations throughout the post-closure care period. These records shall include the surveyed location, surveyed elevation, surveyed elevation reference point, total depth, screened interval, construction details, well log, and all other pertinent information for each well and piezometer.

- d. Records of monitoring information shall include:
  - i. The dates, exact place, and times of sampling or measurements;
  - ii. The individuals who performed the sampling or measurements;
  - iii. The dates in which analyses were performed;
  - iv. The individuals who performed the analyses;
  - v. The analytical techniques or methods used; and
  - vi. The results of such analyses.
- e. The following documents and information shall be maintained throughout the post-closure care period at the Facility.
  - i. Complete copy of this permit and the permit application.
  - ii. Operating record as required by ADEM Admin. Code Rule 335-14-5-.05(4) and this permit.
  - iii. Copies of all plans, reports, inspection schedules, inspection logs as required by ADEM Admin. Code Rule 335-14-5 and this permit.

#### 11. Signatory Requirements

All applications, reports or information submitted to the Department shall be signed and certified in accordance with ADEM Admin. Code Rules 335-14-8-.02(2) and 335-14-8-.03(1)(k).

#### 12. Reporting Requirements

##### a. Planned Changes

The Permittee shall give notice to the Department as soon as possible of any planned physical alterations or additions to the permitted facility and any solid waste management units identified under Part X of this permit.

##### b. Anticipated Noncompliance

The Permittee shall give advance notice to the Department of any planned changes in the permitted facility or activity that may result in noncompliance with permit requirements.

##### c. Transfer of Permit

This permit may be transferred to a new owner or operator only if it is modified or revoked and reissued pursuant to ADEM Admin. Code Rule

335-14-8-.04(1) or ADEM Admin. Code Rule 335-14-8-.04(3)(a)1.(vii). Before transferring ownership or operation of the facility during its post-closure period, the Permittee shall notify the new owner or operator, in writing, of the requirements of ADEM Admin. Code Rules 335-14-5 and 335-14-8 and this permit.

d. Monitoring Reports

Monitoring results shall be reported at the intervals specified elsewhere in this permit.

e. 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 to the Department no later than 14 calendar days following each schedule date.

f. Twenty-Four Hour Reporting

i. The Permittee shall report to the Department any noncompliance with this permit that may endanger human health or the environment. Any such information shall be reported orally within 24 hours from the time the Permittee becomes aware of the circumstances. This report shall include, but is not limited to, the following:

- (I) Information concerning the release of any hazardous waste which may endanger public drinking water supplies; and
- (II) Information concerning the release or discharge of any hazardous waste, or hazardous waste constituents, or of a fire or explosion at the facility, which could threaten the environment or human health outside the facility.

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

- (I) Name, address, and telephone number of the owner or operator;
- (II) Name, address, telephone number, and EPA Identification 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 this is applicable; and
- (VII) Estimated quantity and disposition of recovered material that resulted from the accident.

iii. A written submission shall also be provided within 5 calendar days of the time that the Permittee becomes aware of the circumstances. The written submission shall contain a description of the noncompliance and its cause; the periods of noncompliance (including exact dates and times); whether the noncompliance has been corrected, and if not, the anticipated time it is expected to continue; and steps taken or planned to reduce, eliminate, and prevent recurrence of the noncompliance.

g. Other Noncompliance

The Permittee shall report to the Department all instances of noncompliance not otherwise required by Permit Conditions I.C.12.d., I.C.12.e., or I.C.12.f. at the time any other reports required by this permit are submitted. The reports shall contain the information required by Permit Condition I.C.12.f.

h. Other Information

Where the Permittee becomes aware that it failed to submit any relevant facts in a permit application, or submitted incorrect information in a permit application or in any report to the Department, it shall promptly submit such facts or information. In addition, upon request, the Permittee shall furnish to the Department any information related to compliance with this permit.

13. Certification of Construction

The Permittee may not commence treatment, storage or disposal of hazardous waste or contaminated media at any new or modified portion of the facility until the Permittee has submitted to the Department by certified mail or hand-delivery a letter (together with the certification by the construction quality assurance officer required by ADEM Admin. Code R. 335-14-5-.02(10)(d) and any other certifications required by this permit or ADEM Admin. Code Rule 335-14) signed by the Permittee and a professional engineer registered in the State of Alabama stating that the facility has been constructed or modified in compliance with this permit where appropriate; and,

- a. The Department has inspected the modified or newly constructed facility and finds it is in compliance with the conditions of this permit; or
- b. The Department has either waived the inspection or has not notified the Permittee, within 15 calendar days of the notification from the Permittee, of its intent to inspect.

14. The Permittee shall assure that all measures necessary to maintain and/or achieve compliance with all applicable requirements of ADEM Admin. Code Rules 335-14 are taken during the active life of the facility, and throughout the post-closure care period, corrective action period, and the term of this permit.
15. In the event that circumstances beyond the Permittee's control arise to prevent achievement of any deadline set forth by this permit, the Permittee may immediately, upon the occurrence thereof, request an extension by sending a written request to the Department explaining the need for the extension. The Department may, after consideration of the circumstances, grant the extension. Requests for extensions may require a permit modification pursuant to ADEM Admin. Code Rule 335-14-8-.04(2).

#### **I.D. DEFINITIONS**

For purposes of this permit, terms used herein shall have the same meaning as those in ADEM Admin. Code Rules 335-14-1, 335-14-2, 335-14-5, and 335-14-8, unless this permit specifically provides otherwise. Where terms are not defined in the regulations or this permit, a standard dictionary reference or the generally accepted scientific or industrial meaning of the term shall define the meaning associated with such terms.

"Area of concern" (AOC), for the purposes of this permit, includes any area having a probable release of a hazardous waste or hazardous constituent which is not from a solid waste management unit and is determined by the Department to pose a current or potential threat to human health or the environment. Such areas of concern may require investigations and remedial action as required under Section 3005(c)(3) of the Resource Conservation and Recovery Act and ADEM Admin. Code Rule 335-14-8-.03(3)(b)2. in order to ensure adequate protection of human health and the environment.

"Contamination," for the purposes of this permit, refers to the presence of any hazardous constituent in a concentration that exceeds the naturally occurring concentration of that constituent in the immediate vicinity of the facility (*i.e.*, areas not affected by the facility).

"Extent of contamination," for the purposes of this permit, is defined as the horizontal and vertical area in which the concentrations of hazardous constituents in the environmental media being investigated are above detection limits or background concentrations indicative of the region, whichever is appropriate as determined by the Department.

"Hazardous constituents," for the purposes of this permit, are those substances listed in ADEM Admin. Code Rule 335-14-2-Appendix VIII and/or ADEM Admin. Code Rule 335-14-5-Appendix IX and include hazardous constituents released from solid waste, hazardous waste, and hazardous waste constituents that are reaction by-products.

"Land Use Controls," for the purposes of this permit is as defined by ADEM Admin. Code R. 335-15-1-.02.

"Method detection limit" (MDL), for the purposes of this permit, means the minimum concentration of a substance that can be measured and reported with 99% confidence that

the analyte concentration is greater than zero and is determined from analysis of a sample in a given matrix type containing the analyte.

“Mixed waste,” for the purposes of this permit, means a solid waste that is a mixture of hazardous waste (as defined in ADEM Admin. Code Rule 335-14-2-.01(3)) and radioactive waste (as defined in 10 CFR 61.2). The radioactive component of mixed waste is subject to regulation by the Atomic Energy Act (AEA)/Nuclear Regulatory Commission (NRC). The non-radioactive chemically hazardous component of mixed waste is subject to regulation by the AHWMA and ADEM Admin. Code R. 335-14.

“Operating day,” for the purposes of this permit, means any day on which hazardous waste is treated, stored, or disposed of in a unit. For example, each day that a hazardous waste storage unit contains hazardous waste is an operating day; as is each day that a disposal unit contains or receives hazardous waste, or each day that hazardous waste is treated in a treatment unit.

A “release,” for the purposes of this permit, includes any spilling, leaking, pouring, emitting, emptying, discharging, injecting, escaping, leaching, pumping, or disposing into the environment of any hazardous waste or hazardous constituent.

“Solid waste management unit” (SWMU), for the purposes of this permit, includes any unit which has been used for the treatment, storage or disposal of solid waste at any time, irrespective of whether the unit is or ever was intended for the management of solid waste. RCRA-regulated hazardous waste management units are also solid waste management units. SWMUs include areas that have been contaminated by routine and systematic releases of hazardous waste or hazardous constituents, excluding one-time accidental spills that are immediately remediated and cannot be linked to solid waste management activities (*e.g.*, product or process spills).

“Storm event,” for the purposes of this permit, is defined as a 1-year, 24-hour storm event or rainfall which measures 1 inch or greater in 1 hour or less. Rainfall measurements may be taken at the site, or the closest official weather monitoring station may be used.

#### **I.E. EXPIRATION AND CONTINUATION OF PERMIT**

This permit and all conditions herein will remain in effect beyond this permit's expiration date if the Permittee has submitted a new application as required by Permit Condition I.C.2. and through no fault of the Permittee, the Department has not issued a new permit.

#### **I.F. WASTE MINIMIZATION**

##### **1. Certification Requirements**

Pursuant to ADEM Admin. Code Rule 335-14-5-.05(4)(b)9. the Permittee must certify, no less often than annually, that:

- a. The Permittee has a program in place to reduce the volume and toxicity of hazardous waste to the degree determined by the Permittee to be economically practicable; and

- b. The proposed method of treatment, storage or disposal is the most practicable method available to the Permittee which minimizes the present and future threat to human health and the environment.

2. Recording Requirements

If Permit Condition I.F. is applicable, then the Permittee shall maintain copies of this certification in the facility operating record as required by ADEM Admin. Code Rule 335-14-5-.05(4), (5), and (6).

#### **I.G. COST ESTIMATES**

1. The Permittee shall maintain detailed written cost estimates, in current dollars, at the location specified in Permit Condition I.C.10.e. and on file with ADEM in accordance with ADEM Admin. Code Rules 335-14-5-.08(3), (5), and (10).
2. All cost estimates shall be updated annually as required by ADEM Admin. Code Rule 335-14-5-.08(3)(b), (5)(b), and (10)(b).
3. The cost estimate shall be maintained and submitted in the form designated by the Department.
4. The Permittee shall update the cost estimate no later than 30 calendar days after the Department has approved a modification to the Closure Plan, Post-Closure Plan, or Corrective Action Plan, or any other plan required or referenced by this permit, if the change in the plan results in an increase in the amount of the cost estimate.

#### **I.H. FINANCIAL ASSURANCE**

1. The Permittee shall demonstrate continuous compliance with ADEM Admin. Code Rule 335-14-5-.08 by providing documentation of financial assurance in at least the amount that equals or exceeds the cost estimate. Changes in financial assurance mechanisms must be approved by the Department.
2. The Permittee shall submit itemized statements for all capital expenditures and a complete, revised post-closure cost estimate to the Department when requesting approval for a reduction in the financial assurance mechanism.

#### **I.I. PERMIT MODIFICATIONS**

The Permittee shall request a permit modification whenever changes in operating plans or facility design affect any plan (e.g. closure, groundwater monitoring, post-closure, or corrective action) required or referenced by this permit. The Permittee must submit a written request for a permit modification pursuant to the requirements of ADEM Admin. Code Rule 335-14-8-.04(2) at least 60 calendar days prior to the proposed change in facility design or operation.

**I.J. REPORTS, NOTIFICATIONS, AND SUBMISSIONS TO THE DEPARTMENT**

All reports, notifications, or other submissions that are required by this permit should be sent via certified mail or given to:

Chief, Land Division  
Alabama Department of Environmental Management  
P.O. Box 301463 (Zip 36130-1463)  
1400 Coliseum Boulevard (Zip 36110-2059)  
Montgomery, Alabama

And

Director, RCRA Division  
US EPA Region-4  
Atlanta Federal Center  
61 Forsyth Street SW  
Atlanta Georgia-30303-3104

**PART II****GENERAL FACILITY CONDITIONS****II.A. GENERAL WASTE ANALYSIS**

1. The Permittee shall comply with all requirements set forth under ADEM Admin. Code R. 335-14-5-.02(4) and shall follow the procedures in the waste analysis plan described in Section C-2 of the permit application.
2. The Permittee shall utilize the methods specified in the waste analysis plan (Section C-2 of the permit application), for the analysis of any of the wastes listed in the Part A Application (Section A of the permit application). Modification of the waste analysis plan shall require a modification of this permit pursuant to ADEM Admin. Code R. 335-14-8-.04(2).
3. Except for Miscellaneous Special Wastes, identified in Section C-2-5a of the permit application, the Permittee shall subject samples from incoming waste shipments to the basic mandatory analyses identified in Section C-2-3a of the permit application.
4. The Permittee shall classify waste as non-conforming when the receiving analysis does not match the information contained in the accompanying manifest, profile, and/or equivalent information as described in Section C-2-5 and Figure C-2-4 of the permit application.
5. Before storing, treating, or disposing of a hazardous waste stream, the Permittee shall obtain a detailed chemical and physical analysis of a representative sample of the waste, as described in Section C-2-3 of the permit application.

**II.B. GENERAL INSPECTION REQUIREMENTS**

The Permittee shall follow the inspection procedures and schedules, as described in Section F and Tables F-2-1 through F-2-8 of the permit application.

**II.C. RECORDKEEPING AND REPORTING**

The Permittee shall comply with the requirements of ADEM Admin. Code R. 335-14-5-.05(4), (5), and (6).

**II.D. CONTINGENCY PLAN**

The Permittee shall immediately carry out the provisions of the Contingency Plan described in Section G of the permit application and follow the emergency procedures as required by ADEM Admin. Code R. 335-14-5-.04(2) whenever there is a fire, explosion, or release of hazardous waste or hazardous constituents.

**II.E. WASTE REJECTION NOTIFICATION**

The Permittee shall notify the Department in writing of all hazardous wastes which are rejected after being received at the facility. If the discrepancy is not resolved within fifteen (15) calendar days after receiving the waste the Permittee must submit a letter to the Department describing the

discrepancy and attempts to resolve it along with a copy of the manifest and the applicable waste profile. If the discrepancy is not resolved within twenty-five (25) calendar days after receiving the waste, the Permittee must ship the rejected waste immediately to an alternate facility or back to the original generator and submit a *Waste Rejection Report* to the Department. The Waste Rejection Report shall include the following information:

1. The EPA Identification Numbers, name and addresses of the facility, the generator and transporter;
2. The reason and the date the facility rejected the waste;
3. A description and the quantity of each hazardous waste rejected by the facility with the copies of manifest(s) or shipping papers; and,
4. The certification (as required by ADEM Admin. Code R. 335-14-8-.02(2)(d)) signed by the owner or operator of the facility or his or her authorized representative.

#### **II.F. PREPAREDNESS AND PREVENTION**

The Permittee shall comply with ADEM Admin. Code R. 335-14-5-.03(3), (4), and at a minimum, shall equip the facility with the equipment set forth in the Contingency Plan described in Section G-4 of the permit application.

#### **II.G. MANIFEST SYSTEM**

1. Use of the Manifest System
  - a. The Permittee shall provide the manifest form to persons prior to their shipment of hazardous waste, as required by ADEM Admin. Code R. 335-14-5-.05(1). All manifests shall include the state manifest document number as designated by the Department. (ADEM Admin. Code R. 335-14-5-.05(2)(a))
  - b. If the Permittee receives hazardous waste accompanied by a manifest, the Permittee must:
    - i. Sign and date each copy of the manifest acknowledging receipt of the waste;
    - ii. Note any significant discrepancies in the manifest as described in ADEM Admin. Code R. 335-14-5-.05(3)(a);
    - iii. Immediately give the transporter at least one copy of the signed manifest;
    - iv. Within 30 days after delivery, send a copy of the manifest to the generator;
    - v. Retain a copy of each manifest for at least three years; and

- vi. Within 60 days after delivery of the waste to the facility, send a copy of the manifest to the Department, as required by §22-30-17(c) of the AHWMMA. Manifests should be submitted to the Department on a monthly basis.
  - c. When the decision is made to accept the waste shipment for storage, treatment, and/or disposal at the facility (after the waste shipment has been inspected, sampled, and analyzed), the Permittee shall place the proper handling code on the manifest, as described in Sections C-2-5 of the permit application.
  - d. The Permittee may stage a waste shipment for up to 72 hours after the shipment has been received (in accordance with Condition II.G.1.b.i. of this permit) before placing the waste into a permitted treatment, storage, or disposal area, as described in Section C-2-5 of the permit application.
2. Manifest Discrepancies
- a. Upon discovering a significant discrepancy (as defined by ADEM Admin. Code R. 335-14-5-.05(3)(a)), the Permittee must attempt to reconcile the discrepancy with the generator or transporter.
  - b. If the discrepancy is not resolved within 15 calendar days after receiving the waste, the Permittee must immediately submit to the Department a letter describing the discrepancy and attempts to reconcile it, a copy of the manifest or shipping paper at issue, and a description of what resolution(s) occurred. If a discrepancy is not resolved within 15 calendar days, the waste must be rejected back to the generator within 10 calendar days.
3. Unmanifested Waste Report
- a. If the Permittee accepts for treatment, storage, or disposal any hazardous waste from an off-site source without an accompanying manifest, or without an accompanying shipping paper as described in ADEM Admin. Code R. 335-14-4-.02(1)(e)2., and if the waste is not excluded from the manifest requirement by ADEM Admin. Code R. 335-14-2-.01(5), then the Permittee must prepare and submit a single copy of the report to the Department within 15 days after receiving the waste. [Note: Hazardous waste which arrives at the facility with other manifested hazardous waste and which is accepted for treatment, storage, or disposal at the facility, but which is not included on a manifest, shall be reported as unmanifested waste pursuant to this Condition. Hazardous wastes which are not accepted for treatment, storage, or disposal at the facility are subject to the waste rejection reporting requirements contained in Condition II.E. of this permit.] (ADEM Admin. Code R. 335-14-5-.05(7))
  - b. The unmanifested waste report must be submitted to the Department. Such report must be designated "Unmanifested Waste Report" and include the following information:
    - i. The EPA Identification Number, name and address of the facility;
    - ii. The date the facility received the waste;

- iii. The EPA Identification Number, name and address of the generator and the transporter, if available;
- iv. A description and the quantity of each unmanifested hazardous waste the facility received;
- v. The method of storage for each hazardous waste;
- vi. The certification signed by the owner or operator of the facility or his or her authorized representative; and
- vii. A brief explanation of why the waste was unmanifested, if known.

4. Waste Acceptance

The Permittee shall not accept (*i. e.* assign handling codes) any shipment of waste until the waste analysis has confirmed that the waste matches the waste profile, that the facility is authorized to manage the waste, and all manifest discrepancies are resolved pursuant to ADEM Admin. Code R. 335-14-5-.05(3).

## **PART III**

### **MANAGEMENT IN CONTAINERS**

#### **III.A. PERMITTED OPERATIONS**

The Permittee may operate the units and processes described in Table III.1. and Table III.2. of this permit, subject to the terms of this permit. Operation of any process or unit not listed in Table III.1. and Table III.2. of this permit, operation of any process in a unit or area other than that for which the process is listed, or exceedance of any capacity listed therein, for the treatment, storage, or disposal of hazardous waste is prohibited.

#### **III.B. WASTE IDENTIFICATION**

1. The Permittee may store and treat the hazardous wastes listed in Part A (Section A) of the permit application in containers at the facility, subject to the terms of this permit. The storage or treatment of any hazardous waste not listed in Part A (Section A) of the permit application is prohibited.
2. The Permittee shall not store or treat mixed waste in containers at the facility.

#### **III.C. STORAGE IN CONTAINERS**

1. The Permittee shall maintain and operate the container storage areas in accordance with the procedures specified in Section D-1-1a of the permit application.
2. The container storage capacity is distributed among the various container storage areas as shown in Table III.1. of this permit, and as described in Appendix D-1-1 of the permit application. The maximum quantity of hazardous waste stored in each unit or containment area shall not exceed the capacity listed in Table III.1. of this permit.
3. The sampling and staging of drums shall not exceed 72 hours. All containers that are to be fingerprinted or are awaiting analysis shall be segregated from other containers in the container storage area. Each container shall be marked with the date of receipt.

#### **III.D. TREATMENT IN CONTAINERS**

The Permittee shall treat hazardous waste in containers only in the container processing areas listed in Table III.2 of this permit and as described in Section D-1-1c of the permit application.

#### **III.E. CONTAINMENT**

1. The Permittee shall maintain the containment systems of the container storage and treatment areas in accordance with the requirements of ADEM Admin. Code R. 335-14-5-.09(6)(b) , and as specified in Section D-1-1b of the permit application.
2. The Permittee shall maintain an impervious coating which is free of cracks, gaps, or other deterioration on all containment system surfaces which may be exposed to hazardous wastes or hazardous constituents (or releases of hazardous wastes or hazardous constituents).

**III.F. INSPECTIONS**

The Permittee shall inspect areas where containers are stored or handled to detect leaking containers and deterioration of containers or containment systems and to ensure stacking is no more than two high as specified in Section D-1-1a(10) of the permit application and as required by ADEM Admin. Code R. 335-14-5-.09(5).

**III.G. SPECIAL REQUIREMENTS FOR IGNITABLE OR REACTIVE WASTES**

The Permittee shall comply with the specified requirements of Section D-1-1a(12) and Section D-1-1c(4) of the permit application and the requirements of ADEM Admin. Code R. 335-14-5-.09(7) and 335-14-5-.02(8).

**III.H. SPECIAL REQUIREMENTS FOR INCOMPATIBLE WASTE**

The Permittee shall comply with the specified requirements of Section D-1-1a(11) and Section D-1-1c(3) of the permit application and the requirements of ADEM Admin. Code R. 335-14-5-.09(8) and 335 14-5-.02(8).

**III.I. CLOSURE**

1. Following the receipt of the final volume of hazardous wastes, the Permittee shall close the container storage and treatment areas in accordance with the requirements of the Closure Plan, Appendix I of the permit application, and Rules 335-14-5-.07(2) and 335-14-5-.09(9) of the ADEM Administrative Code.
2. If at closure not all waste and contaminated structures and soils at a unit can be removed or decontaminated, the Permittee shall close the container storage or treatment unit as a landfill and perform post-closure care as specified in ADEM Admin. Code R. 335-14-5-.09(9)(b) and 335-14-5-.14(11).

**III.J. CONDITION OF CONTAINERS**

If a container holding hazardous waste is not in good condition (*e.g.*, severe rusting, apparent structural defects) or if it begins to leak, upon discovery the Permittee shall immediately transfer the hazardous waste from such container to a container that is in good condition or otherwise manage the waste in compliance with the conditions of ADEM Admin. Code R. 335-14-5-.09(2).

**TABLE III.1.**  
**STORAGE IN CONTAINERS**

| UNIT NAME  | CONTAINMENT<br>AREA | PERMITTED<br>STORAGE<br>CAPACITY<br>(gallons) | CONTAINMENT<br>CAPACITY<br>(gallons) | DESCRIPTION<br>OF UNIT<br>(Section <sup>1</sup> ) | LOCATION<br>OF UNIT<br>(Figure <sup>1</sup> ) |
|------------|---------------------|-----------------------------------------------|--------------------------------------|---------------------------------------------------|-----------------------------------------------|
| Unit 406   | Area 1              | 32,320                                        | 18,662                               | D-1-2a                                            | 0100-020-001                                  |
|            | Area 2              | 32,320                                        | 19,036                               | D-1-2a                                            | 0100-020-001                                  |
|            | Area 3              | 32,320                                        | 18,662                               | D-1-2a                                            | 0100-020-001                                  |
|            | Area 4A             | 48,480                                        | 13,254                               | D-1-2a                                            | 0100-020-001                                  |
|            | Area 4B             | 48,480                                        | 13,254                               | D-1-2a                                            | 0100-020-001                                  |
|            | Area 5A             | 48,480                                        | 13,516                               | D-1-2a                                            | 0100-020-001                                  |
|            | Area 5B             | 48,480                                        | 13,516                               | D-1-2a                                            | 0100-020-001                                  |
|            | Area 6A             | 48,480                                        | 13,516                               | D-1-2a                                            | 0100-020-001                                  |
|            | Area 6B             | 48,480                                        | 13,516                               | D-1-2a                                            | 0100-020-001                                  |
|            | Area 7A             | 48,480                                        | 13,516                               | D-1-2a                                            | 0100-020-001                                  |
|            | Area 7B             | 48,480                                        | 13,516                               | D-1-2a                                            | 0100-020-001                                  |
|            | Area 8A             | 48,480                                        | 13,516                               | D-1-2a                                            | 0100-020-001                                  |
|            | Area 8B             | 48,480                                        | 13,516                               | D-1-2a                                            | 0100-020-001                                  |
|            | Area 9A             | 48,480                                        | 13,516                               | D-1-2a                                            | 0100-020-001                                  |
|            | Area 9B             | 48,480                                        | 13,516                               | D-1-2a                                            | 0100-020-001                                  |
|            | Area 10A            | 48,480                                        | 13,516                               | D-1-2a                                            | 0100-020-001                                  |
|            | Area 10B            | 48,480                                        | 13,516                               | D-1-2a                                            | 0100-020-001                                  |
|            | Area 11A            | 48,480                                        | 13,254                               | D-1-2a                                            | 0100-020-001                                  |
|            | Area 11B            | 48,480                                        | 13,254                               | D-1-2a                                            | 0100-020-001                                  |
|            | Area 12             | 32,320                                        | 15,545                               | D-1-2a                                            | 0100-020-001                                  |
|            | Area 13             | 32,320                                        | 19,829                               | D-1-2a                                            | 0100-020-001                                  |
|            | Area 14             | 32,320                                        | 19,545                               | D-1-2a                                            | 0100-020-001                                  |
| UNIT TOTAL |                     | 969,600                                       |                                      |                                                   |                                               |
| Unit 520   |                     | 12,120                                        | 14,571                               | D-1-2b                                            | 0100-020-001                                  |
| Unit 600   | Area 1              | 5,000                                         | 7,644                                | D-1-2c                                            | 0100-020-001                                  |
|            | Area 2              | 15,000                                        | 24,310                               | D-1-2c                                            | 0100-020-001                                  |
|            | UNIT TOTAL          | 20,000                                        |                                      |                                                   |                                               |

TABLE III.1. (continued)

| UNIT NAME | CONTAINMENT AREA | PERMITTED STORAGE CAPACITY (gallons) | CONTAINMENT CAPACITY (gallons) | DESCRIPTION OF UNIT (Section <sup>1</sup> ) | LOCATION OF UNIT (Figure <sup>1</sup> ) |
|-----------|------------------|--------------------------------------|--------------------------------|---------------------------------------------|-----------------------------------------|
| Unit 603  | Area 1           | 8,800                                | 1,361                          | D-1-2e                                      | 0100-020-001                            |
|           | Area 2           | 4,400                                | 478                            | D-1-2e                                      | 0100-020-001                            |
|           | Area 3           | 8,800                                | 1,361                          | D-1-2e                                      | 0100-020-001                            |
|           | Area 4           | 8,800                                | 1,361                          | D-1-2e                                      | 0100-020-001                            |
|           | Area 5           | 4,400                                | 478                            | D-1-2e                                      | 0100-020-001                            |
|           | Area 6           | 4,400                                | 478                            | D-1-2e                                      | 0100-020-001                            |
|           | Area 7           | 4,400                                | 478                            | D-1-2e                                      | 0100-020-001                            |
|           | Area 8           | 2,420                                | 478                            | D-1-2e                                      | 0100-020-001                            |
|           | Area 9           | 2,420                                | 478                            | D-1-2e                                      | 0100-020-001                            |
|           | Area 10          | 2,420                                | 478                            | D-1-2e                                      | 0100-020-001                            |
|           | Area 11          | 4,840                                | 1,361                          | D-1-2e                                      | 0100-020-001                            |
|           | Area 12          | 4,840                                | 1,361                          | D-1-2e                                      | 0100-020-001                            |
|           | Area 13          | 2,420                                | 478                            | D-1-2e                                      | 0100-020-001                            |
|           | Area 14          | 4,840                                | 1,361                          | D-1-2e                                      | 0100-020-001                            |
|           | Area 15          | 12,120                               | 14,571                         | D-1-2e                                      | 0100-020-001                            |
|           | UNIT TOTAL       | 80,320                               |                                |                                             |                                         |
| Unit 604  | Area 1           | 33,660                               | 25,227                         | D-1-2f                                      | 0100-020-001                            |
|           | Area 2           | 20,200                               | 11,549                         | D-1-2f                                      | 0100-020-001                            |
|           | UNIT TOTAL       | 53,860                               |                                |                                             |                                         |

TABLE III.1. (continued)

| UNIT NAME  | CONTAINMENT AREA | PERMITTED STORAGE CAPACITY (gallons) | CONTAINMENT CAPACITY (gallons) | DESCRIPTION OF UNIT (Section <sup>1</sup> ) | LOCATION OF UNIT (Figure <sup>1</sup> ) |
|------------|------------------|--------------------------------------|--------------------------------|---------------------------------------------|-----------------------------------------|
| Unit 700   | Area 1A          | 8,360                                | 942                            | D-1-2g                                      | 0100-020-001                            |
|            | Area 1B          | 8,360                                | 942                            | D-1-2g                                      | 0100-020-001                            |
|            | Area 2A          | 8,360                                | 942                            | D-1-2g                                      | 0100-020-001                            |
|            | Area 2B          | 8,360                                | 942                            | D-1-2g                                      | 0100-020-001                            |
|            | Area 3A          | 8,360                                | 942                            | D-1-2g                                      | 0100-020-001                            |
|            | Area 3B          | 8,360                                | 942                            | D-1-2g                                      | 0100-020-001                            |
|            | Area 4A          | 8,360                                | 942                            | D-1-2g                                      | 0100-020-001                            |
|            | Area 4B          | 8,360                                | 942                            | D-1-2g                                      | 0100-020-001                            |
|            | Area 5           | 8,360                                | 942                            | D-1-2g                                      | 0100-020-001                            |
|            | Area 6           | 8,360                                | 942                            | D-1-2g                                      | 0100-020-001                            |
|            | Area 7           | 8,360                                | 942                            | D-1-2g                                      | 0100-020-001                            |
|            | Area 8           | 4,180                                | 451                            | D-1-2g                                      | 0100-020-001                            |
|            | Area 9           | 4,180                                | 451                            | D-1-2g                                      | 0100-020-001                            |
|            | Area 10          | 5,280                                | 569                            | D-1-2g                                      | 0100-020-001                            |
|            | Area 11          | 5,280                                | 569                            | D-1-2g                                      | 0100-020-001                            |
|            | Area 12          | 12,120                               | 13,742                         | D-1-2g                                      | 0100-020-001                            |
|            | Area 13          | 40,400                               | 15,439                         | D-1-2g                                      | 0100-020-001                            |
|            | Area 14          | 40,400                               | 17,208                         | D-1-2g                                      | 0100-020-001                            |
|            | Area 15          | 12,120                               | 13,137                         | D-1-2g                                      | 0100-020-001                            |
|            | Area 16          | 12,120                               | 14,615                         | D-1-2g                                      | 0100-020-001                            |
|            | Area 17          | 6,930                                | 22,379                         | D-1-2g                                      | 0100-020-001                            |
| UNIT TOTAL |                  | 234,970                              |                                |                                             |                                         |

TABLE III.1. (continued)

| UNIT NAME  | CONTAINMENT AREA | PERMITTED STORAGE CAPACITY (gallons) | CONTAINMENT CAPACITY (gallons) | DESCRIPTION OF UNIT (Section <sup>1</sup> ) | LOCATION OF UNIT (Figure <sup>1</sup> ) |
|------------|------------------|--------------------------------------|--------------------------------|---------------------------------------------|-----------------------------------------|
| Unit 702   | Area 1A          | 8,360                                | 942                            | D-1-2h                                      | 0100-020-001                            |
|            | Area 1B          | 8,360                                | 942                            | D-1-2h                                      | 0100-020-001                            |
|            | Area 2A          | 8,360                                | 942                            | D-1-2h                                      | 0100-020-001                            |
|            | Area 2B          | 8,360                                | 942                            | D-1-2h                                      | 0100-020-001                            |
|            | Area 3A          | 8,360                                | 942                            | D-1-2h                                      | 0100-020-001                            |
|            | Area 3B          | 8,360                                | 942                            | D-1-2h                                      | 0100-020-001                            |
|            | Area 4A          | 8,360                                | 942                            | D-1-2h                                      | 0100-020-001                            |
|            | Area 4B          | 8,360                                | 942                            | D-1-2h                                      | 0100-020-001                            |
|            | Area 5           | 3,740                                | 546                            | D-1-2h                                      | 0100-020-001                            |
|            | Area 6           | 7,480                                | 942                            | D-1-2h                                      | 0100-020-001                            |
|            | Area 7           | 3,740                                | 448                            | D-1-2h                                      | 0100-020-001                            |
|            | Area 8           | 3,740                                | 448                            | D-1-2h                                      | 0100-020-001                            |
|            | Area 9           | 3,740                                | 448                            | D-1-2h                                      | 0100-020-001                            |
|            | Area 10          | 3,740                                | 448                            | D-1-2h                                      | 0100-020-001                            |
|            | Area 11          | 6,930                                | 1,929                          | D-1-2h                                      | 0100-020-001                            |
|            | Area 12          | 3,740                                | 97,965                         | D-1-2h                                      | 0100-020-001                            |
|            | Area 13          | 8,080                                | 4,896                          | D-1-2h                                      | 0100-020-001                            |
|            | Area 14          | 24,240                               | 31,247                         | D-1-2h                                      | 0100-020-001                            |
| UNIT TOTAL |                  | 136,050                              |                                |                                             |                                         |
| Unit 703A  | Area 1           | 10,000                               | 13,254                         | D-1-2i                                      | 0100-020-001                            |
| Unit 1200A | Area 1           | 129,280                              | 92,180                         | D-1-2k                                      | 0100-020-001                            |

TABLE III.1. (continued)

| UNIT NAME | CONTAINMENT AREA  | PERMITTED STORAGE CAPACITY (gallons) | CONTAINMENT CAPACITY (gallons) | DESCRIPTION OF UNIT (Section <sup>1</sup> ) | LOCATION OF UNIT (Figure <sup>1</sup> ) |
|-----------|-------------------|--------------------------------------|--------------------------------|---------------------------------------------|-----------------------------------------|
| Unit 2000 | Areas 1, 2, and 3 | 48,480                               | n/a <sup>2</sup>               | D-1-2n                                      | 0100-020-001                            |
| Unit 2200 | Area 1            | 48,480                               | 14,337                         | D-1-2o                                      | 0100-020-001                            |
|           | Area 2            | 48,480                               | 12,630                         | D-1-2o                                      | 0100-020-001                            |
|           | Area 3            | 48,480                               | 12,630                         | D-1-2o                                      | 0100-020-001                            |
|           | Area 4            | 48,480                               | 12,630                         | D-1-2o                                      | 0100-020-001                            |
|           | Area 5            | 48,480                               | 12,630                         | D-1-2o                                      | 0100-020-001                            |
|           | Area 6            | 48,480                               | 12,630                         | D-1-2o                                      | 0100-020-001                            |
|           | Area 7            | 48,480                               | 12,630                         | D-1-2o                                      | 0100-020-001                            |
|           | Area 8            | 48,480                               | 12,630                         | D-1-2o                                      | 0100-020-001                            |
|           | Area 9            | 48,480                               | 12,630                         | D-1-2o                                      | 0100-020-001                            |
|           | Area 10           | 48,480                               | 12,630                         | D-1-2o                                      | 0100-020-001                            |
|           | Area 11           | 48,480                               | 12,630                         | D-1-2o                                      | 0100-020-001                            |
|           | Area 12           | 48,480                               | 12,630                         | D-1-2o                                      | 0100-020-001                            |
|           | Area 13           | 48,480                               | 12,630                         | D-1-2o                                      | 0100-020-001                            |
|           | Area 14           | 48,480                               | 12,630                         | D-1-2o                                      | 0100-020-001                            |
|           | Area 15           | 48,480                               | 12,630                         | D-1-2o                                      | 0100-020-001                            |
|           | Area 16           | 48,480                               | 12,630                         | D-1-2o                                      | 0100-020-001                            |
|           | Area 17           | 48,480                               | 12,630                         | D-1-2o                                      | 0100-020-001                            |
|           | Area 18           | 48,480                               | 14,337                         | D-1-2o                                      | 0100-020-001                            |
|           | Area 19           | 48,480                               | 14,337                         | D-1-2o                                      | 0100-020-001                            |
|           | Area 20           | 48,480                               | 12,630                         | D-1-2o                                      | 0100-020-001                            |
|           | Area 21           | 48,480                               | 12,630                         | D-1-2o                                      | 0100-020-001                            |
|           | Area 22           | 48,480                               | 12,630                         | D-1-2o                                      | 0100-020-001                            |
|           | Area 23           | 48,480                               | 12,630                         | D-1-2o                                      | 0100-020-001                            |
|           | Area 24           | 48,480                               | 12,630                         | D-1-2o                                      | 0100-020-001                            |
|           | Area 25           | 48,480                               | 12,630                         | D-1-2o                                      | 0100-020-001                            |
|           | Area 26           | 48,480                               | 14,337                         | D-1-2o                                      | 0100-020-001                            |
|           | UNIT TOTAL        | 1,260,480                            |                                |                                             |                                         |

TABLE III.1. (continued)

| UNIT NAME                           | CONTAINMENT<br>AREA | PERMITTED<br>STORAGE<br>CAPACITY<br>(gallons) | CONTAINMENT<br>CAPACITY<br>(gallons) | DESCRIPTION<br>OF UNIT<br>(Section <sup>1</sup> ) | LOCATION<br>OF UNIT<br>(Figure <sup>1</sup> ) |
|-------------------------------------|---------------------|-----------------------------------------------|--------------------------------------|---------------------------------------------------|-----------------------------------------------|
| TOTAL CONTAINER<br>STORAGE CAPACITY |                     | 2,922,836                                     |                                      |                                                   |                                               |

<sup>1</sup> Location in application containing description (text), location (figure) of unit.

<sup>2</sup> Storage of containers containing free liquids not allowed in Unit 2000; therefore secondary containment capacity not applicable.

**TABLE III.2.**  
**TREATMENT IN CONTAINERS (T04)**

| TREATMENT<br>PROCESS (Code <sup>4</sup> ) | UNIT(S)<br>PERMITTED                  | PERMITTED<br>TREATMENT<br>CAPACITY <sup>1</sup><br>(gals/day) | DESCRIPTION<br>OF PROCESS<br>(Section <sup>2</sup> ) | LOCATION<br>OF PROCESS<br>(Figure <sup>2</sup> )  | DESCRIPTION<br>OF UNIT<br>(Section <sup>2</sup> ) | LOCATION<br>OF UNIT<br>(Figure <sup>2</sup> ) |
|-------------------------------------------|---------------------------------------|---------------------------------------------------------------|------------------------------------------------------|---------------------------------------------------|---------------------------------------------------|-----------------------------------------------|
| T04 <sup>3</sup>                          | Unit 520                              | 25,000                                                        | D-1-1d                                               | 0520-020-010                                      | D-1-2b                                            | 0100-020-001                                  |
|                                           | Unit 600                              | 20,000                                                        | D-1-2d                                               | 0600-020-001                                      | D-1-2c                                            | 0100-020-001                                  |
|                                           | Unit 604                              | 53,860                                                        | D-1-1d                                               | 0604-020-001                                      | D-1-2f                                            | 0100-020-001                                  |
|                                           | Unit 700                              | 306,740                                                       | D-1-1d                                               | 0700-020-001,<br>0700-020-002                     | D-1-2g                                            | 0100-020-001                                  |
|                                           | Unit 702                              | 213,590                                                       | D-1-1d                                               | 0702-020-001                                      | D-1-2h                                            | 0100-020-001                                  |
|                                           | Unit 1200A                            | 129,280                                                       | D-1-1d                                               | 1200A-020-001,<br>1200A-020-002,<br>1200A-020-003 | D-1-2k                                            | 0100-020-001                                  |
|                                           | Unit 2000                             | 16,156                                                        | D-1-1d                                               | 2000-020-001,<br>2000-020-002                     | D-1-2n                                            | 0100-020-001                                  |
|                                           | Unit 2200                             | 80,800                                                        | D-1-1d                                               | 2200-020-001,<br>2200-020-002,<br>2200-020-003    | D-1-2o                                            | 0100-020-001                                  |
|                                           | TOTAL CONTAINER<br>TREATMENT CAPACITY | 845,426                                                       |                                                      |                                                   |                                                   |                                               |

<sup>1</sup> The capacities listed herein do not include treatment of waste in tanks (T01); treatment of waste en masse (T94); or treatment of wastes in miscellaneous units (T04) in these units.

<sup>2</sup> Location in application containing description (text), location (figure) of process/unit.

<sup>3</sup> T04 treatment includes Decanting (T38<sup>4</sup>), Blending (T50), Bulking (T47), Separation (T47), Physical Fixation (T47), Solidification (T47), Stabilization (T21/T22/T23/T24), Debris Treatment (T47), Macro-encapsulation (T39), Micro-encapsulation (T34/T39), Neutralization (T31), Oxidation (T22)/Reduction (T24). See Section D-1 of the permit application for additional information.

<sup>4</sup> Treatment process codes as defined in ADEM Admin. Code R. 335-14-5-Appendix I.

**PART IV****MANAGEMENT IN TANKS****IV.A. PERMITTED OPERATIONS**

The Permittee may operate the units and processes described in Table IV.1. and IV.2. of this permit, subject to the terms of this permit. Operation of any process or unit not listed in Table IV.1. and IV.2. of this permit, operation of any process in a unit or area other than that for which the process is listed, or exceedance of any capacity listed therein, for the treatment, storage, or disposal of hazardous waste is prohibited.

**IV.B. WASTE IDENTIFICATION**

1. The Permittee may store and treat the hazardous wastes listed in Part A (Section A) of the permit application in tanks at the facility, subject to the terms of this permit. The storage or treatment of any hazardous waste not listed in Part A (Section A) of the permit application is prohibited.
2. The Permittee shall not store or treat mixed waste in tanks at the facility.

**IV.C. STORAGE IN TANKS**

1. The tank storage capacity is distributed among the various tanks and tank farms as shown in Table IV.1. of this permit, and as described in Section D-2-1 of the permit application. The maximum quantity of hazardous waste stored in each unit or containment area shall not exceed the capacity listed in Table IV.1. of this permit.
2. The Permittee shall maintain and operate the tank storage areas in accordance with the procedures specified in Section D-2-3 of the permit application and in ADEM Admin. Code R. 335-14-5-.10.
3. The maximum combined quantity of hazardous and non-hazardous waste stored in a given area shall not exceed ten times the capacity of the containment system for that area. The maximum combined quantity of hazardous and non-hazardous waste stored in an individual tank in a given area shall not exceed the capacity of the containment system for that area.

**IV.D. TREATMENT IN TANKS**

1. The Permittee shall comply with the tank treatment process and capacity restrictions listed in Table IV.2. of this permit.
2. The Permittee shall ensure that structural integrity of tanks, and processes of treatment are in accordance with Section D-2-4 of the permit application.
3. The Permittee shall not substitute dilution of chemicals for treatment, except as allowed by ADEM Admin. Code R. 335-14-9-.01(3).
4. The Permittee shall ensure that all chemical reactions have sufficiently occurred to prevent subsequent uncontrolled reactions before the process is stopped.

5. The Permittee shall manage all treatment residues in accordance with all applicable provisions of ADEM Admin. Code R. 335-13 and/or 335-14.
6. The Permittee shall enter records of all treatment activities, including hazardous waste numbers and descriptions, quantities, method(s) of treatment, and date(s) of treatment, into the operating record for each batch of waste treated.

#### **IV.E. INSTALLATION REQUIREMENTS**

The tank system must be installed in accordance with Section D-2-3j of the permit application and ADEM Admin. Code R. 335-14-5-.10(3).

#### **IV.F. GENERAL OPERATING REQUIREMENTS**

The Permittee shall comply with the tank-operating requirements of ADEM Admin. Code R. 335-14-5-.02(6), 335-14-5-.10(2), 335-14-5-.10(5)(a), 335-14-5-.10(5)(b), 335-14-5-.10(5)(c), and 335-14-5-.10(6)(b).

#### **IV.G. SECONDARY CONTAINMENT REQUIREMENTS**

The Permittee shall maintain the secondary containment systems for all storage and/or treatment tanks and for all ancillary equipment as specified in Section D-2-2d of the permit application and in accordance with the requirements of ADEM Admin. Code R. 335-14-5-.10(4).

#### **IV.H. INSPECTIONS**

1. The Permittee shall inspect each tank system (to include the ancillary equipment and secondary containment) and the area surrounding each tank as specified in Section D-2-3h of the permit application and in accordance with the requirements of ADEM Admin. Code R. 335-14-5-.10(6).
2. The Permittee must document in the operating record of the facility the results of inspection required by Condition IV.H.1.

#### **IV.I. RESPONSE TO LEAKS OR SPILLS**

The Permittee shall comply with the requirements of ADEM Admin. Code R. 335-14-5-.10(7).

#### **IV.J. SPECIAL REQUIREMENTS FOR IGNITABLE OR REACTIVE WASTES**

The Permittee shall comply with the requirements specified in Section D-2-3d of the permit application and ADEM Admin. Code R. 335-14-5-.10(9).

#### **IV.K. SPECIAL REQUIREMENTS FOR INCOMPATIBLE WASTES**

The Permittee shall comply with the requirements specified in Section D-2-3e of the permit application and ADEM Admin. Code R. 335-14-5-.10(10).

#### IV.L. CLOSURE

1. Following the receipt of the final volume of hazardous waste, the Permittee shall close the tank in accordance with the Closure Plan contained in Section I of the permit application and as required by ADEM Admin. Code R. 335-14-5-.10(8).
2. If at closure not all contaminated soils can be practically removed or decontaminated, the Permittee shall close the tank as a landfill and perform post-closure care as specified in ADEM Admin. Code R. 335-14-5-.10(8)(b).

**TABLE IV.1.**  
**STORAGE IN TANKS (S02)**

|            |                     |            | PERMITTED<br>STORAGE<br>CAPACITY | CONTAINMENT<br>CAPACITY | DESCRIPTION<br>OF UNIT  | LOCATION<br>OF UNIT    |
|------------|---------------------|------------|----------------------------------|-------------------------|-------------------------|------------------------|
| UNIT NAME  | CONTAINMENT<br>AREA | TANKS      | (gallons)                        | (gallons)               | (Section <sup>1</sup> ) | (Figure <sup>1</sup> ) |
| Unit 520   | Area 2              | T-520      | 25,066                           | 32,542                  | D-2-5a                  | 0100-020-001           |
| Unit 600   | Area 3              | T-634      | 10,152                           |                         | D-2-5b                  | 0100-020-001           |
|            |                     | T-635      | 10,152                           |                         | D-2-5b                  | 0100-020-001           |
|            |                     | T-636      | 10,152                           |                         | D-2-5b                  | 0100-020-001           |
|            |                     | AREA TOTAL | 30,456                           | 51,750                  | D-2-5b                  | 0100-020-001           |
|            | UNIT TOTAL          |            | 30,456                           |                         |                         |                        |
| Unit 708   | 2                   | T-725      | 1,003                            | 2                       | D-2-5e                  | 0100-020-001           |
|            |                     | T-726      | 4,731                            |                         | D-2-5e                  | 0100-020-001           |
|            | UNIT TOTAL          |            | 5,734                            |                         |                         |                        |
| Unit 900   | Area 1              | T-901      | 1,903                            |                         | D-2-5g                  | 0100-020-001           |
|            |                     | T-902      | 1,903                            |                         | D-2-5g                  | 0100-020-001           |
|            |                     | AREA TOTAL | 3,806                            | 3,840                   | D-2-5g                  | 0100-020-001           |
|            | Area 2              | T-903      | 3,104                            | 11,431                  | D-2-5g                  | 0100-020-001           |
|            | Area 3              | T-904      | 3,104                            | 13,745                  | D-2-5g                  | 0100-020-001           |
|            | UNIT TOTAL          |            | 10,014                           |                         |                         |                        |
| Unit 1200A | 2                   | T-1201A    | 20,802                           |                         | D-2-5i                  | 0100-020-001           |
|            |                     | T-1202A    | 20,389                           |                         | D-2-5i                  | 0100-020-001           |
|            |                     | AREA TOTAL | 41,200                           | 2                       | D-2-5i                  | 0100-020-001           |
|            | 2                   | T-1203A    | 1,200                            |                         | D-2-5i                  | 0100-020-001           |
|            |                     | T-1204A    | 1,500                            |                         | D-2-5i                  | 0100-020-001           |
|            |                     | AREA TOTAL | 2,700                            | 2                       | D-2-5i                  | 0100-020-001           |
| UNIT TOTAL |                     | 43,900     |                                  |                         |                         |                        |

TABLE IV.1. (continued)

|            |                     |        | PERMITTED<br>STORAGE<br>CAPACITY | CONTAINMENT<br>CAPACITY | DESCRIPTION<br>OF UNIT  | LOCATION<br>OF UNIT    |
|------------|---------------------|--------|----------------------------------|-------------------------|-------------------------|------------------------|
| UNIT NAME  | CONTAINMENT<br>AREA | TANKS  | (gallons)                        | (gallons)               | (Section <sup>1</sup> ) | (Figure <sup>1</sup> ) |
| Unit 1400  | Area 1              | T-1405 | 508,333                          |                         | D-2-5j                  | 0100-020-001           |
|            |                     | T-1406 | 508,333                          |                         | D-2-5j                  | 0100-020-001           |
|            |                     | T-1407 | 508,333                          |                         | D-2-5j                  | 0100-020-001           |
|            |                     | T-1408 | 508,333                          |                         | D-2-5j                  | 0100-020-001           |
|            |                     | T-1409 | 250,195                          |                         | D-2-5j                  | 0100-020-001           |
|            |                     | T-1410 | 250,195                          |                         | D-2-5j                  | 0100-020-001           |
|            |                     | T-1411 | 250,195                          |                         | D-2-5j                  | 0100-020-001           |
|            |                     | T-1412 | 250,195                          |                         | D-2-5j                  | 0100-020-001           |
|            |                     | T-1413 | 250,195                          |                         | D-2-5j                  | 0100-020-001           |
|            |                     | T-1414 | 250,195                          |                         | D-2-5j                  | 0100-020-001           |
|            |                     | T-1415 | 250,195                          |                         | D-2-5j                  | 0100-020-001           |
|            |                     | T-1416 | 250,195                          |                         | D-2-5j                  | 0100-020-001           |
|            |                     | T-1417 | 250,195                          |                         | D-2-5j                  | 0100-020-001           |
|            |                     | T-1418 | 250,195                          |                         | D-2-5j                  | 0100-020-001           |
|            |                     | T-1419 | 250,195                          |                         | D-2-5j                  | 0100-020-001           |
|            |                     | T-1420 | 250,195                          |                         | D-2-5j                  | 0100-020-001           |
|            |                     |        | AREA TOTAL                       | 5,035,672               | 784,264                 | D-2-5j                 |
|            | Area 2              | T-1421 | 508,333                          |                         | D-2-5j                  | 0100-020-001           |
|            |                     | T-1422 | 508,333                          |                         | D-2-5j                  | 0100-020-001           |
|            |                     | T-1423 | 508,333                          |                         | D-2-5j                  | 0100-020-001           |
|            |                     | T-1424 | 508,333                          |                         | D-2-5j                  | 0100-020-001           |
|            |                     | T-1425 | 250,195                          |                         | D-2-5j                  | 0100-020-001           |
|            |                     | T-1426 | 250,195                          |                         | D-2-5j                  | 0100-020-001           |
|            |                     | T-1427 | 250,195                          |                         | D-2-5j                  | 0100-020-001           |
|            |                     | T-1428 | 250,195                          |                         | D-2-5j                  | 0100-020-001           |
|            |                     | T-1429 | 250,195                          |                         | D-2-5j                  | 0100-020-001           |
|            |                     | T-1430 | 250,195                          |                         | D-2-5j                  | 0100-020-001           |
|            |                     | T-1431 | 250,195                          |                         | D-2-5j                  | 0100-020-001           |
|            |                     | T-1432 | 250,195                          |                         | D-2-5j                  | 0100-020-001           |
|            |                     | T-1433 | 250,195                          |                         | D-2-5j                  | 0100-020-001           |
|            |                     | T-1434 | 250,195                          |                         | D-2-5j                  | 0100-020-001           |
|            |                     | T-1435 | 250,195                          |                         | D-2-5j                  | 0100-020-001           |
|            |                     | T-1436 | 250,195                          |                         | D-2-5j                  | 0100-020-001           |
|            |                     |        | AREA TOTAL                       | 5,035,672               | 784,264                 | D-2-5j                 |
| UNIT TOTAL |                     |        | 10,071,344                       |                         |                         |                        |

TABLE IV.1. (continued)

| UNIT NAME                   | CONTAINMENT AREA | TANKS      | PERMITTED | CONTAINMENT | DESCRIPTION             | LOCATION               |
|-----------------------------|------------------|------------|-----------|-------------|-------------------------|------------------------|
|                             |                  |            | STORAGE   |             |                         |                        |
|                             |                  |            | (gallons) | (gallons)   | (Section <sup>1</sup> ) | (Figure <sup>1</sup> ) |
| Unit 1700                   | Area 1           | T-A        | 2,500     | 10,714      | D-2-5l                  | 0100-020-001           |
|                             |                  | AREA TOTAL | 2,500     | 10,714      | D-2-5l                  | 0100-020-001           |
|                             | Area 2           | T-1701     | 25,379    |             | D-2-5l                  | 0100-020-001           |
|                             |                  | T-1702     | 25,379    |             | D-2-5l                  | 0100-020-001           |
|                             |                  | AREA TOTAL | 50,758    | 36,543      | D-2-5l                  | 0100-020-001           |
|                             | Area 3           | T-1703     | 25,379    |             | D-2-5l                  | 0100-020-001           |
|                             |                  | T-1704     | 25,379    |             | D-2-5l                  | 0100-020-001           |
|                             |                  | AREA TOTAL | 50,758    | 36,543      | D-2-5l                  | 0100-020-001           |
|                             | UNIT TOTAL       |            | 104,016   |             |                         |                        |
| TOTAL TANK STORAGE CAPACITY |                  | 5,250,531  |           |             |                         |                        |

<sup>1</sup> Location in application containing description (text), location (figure) of unit.

<sup>2</sup> Indicates double-walled tank which contains 100% of the tank volume; therefore, additional secondary containment not applicable.

**TABLE IV.2.**  
**TREATMENT IN TANKS (T01)**

| <b>TREATMENT<br/>PROCESS (Code<sup>1</sup>)</b>                     | <b>UNIT(S)<br/>PERMITTED</b> | <b>PERMITTED<br/>TREATMENT<br/>CAPACITY<sup>2</sup><br/>(gal/day)</b> | <b>DESCRIPTION<br/>OF PROCESS<br/>(Section<sup>3</sup>)</b> | <b>LOCATION<br/>OF PROCESS<br/>(Figure<sup>3</sup>)</b>      | <b>DESCRIPTION<br/>OF UNIT<br/>(Section<sup>3</sup>)</b> | <b>LOCATION<br/>OF UNIT<br/>(Figure<sup>3</sup>)</b> |
|---------------------------------------------------------------------|------------------------------|-----------------------------------------------------------------------|-------------------------------------------------------------|--------------------------------------------------------------|----------------------------------------------------------|------------------------------------------------------|
| Blending, Mixing, and Bulking<br>(T47/T50)                          | Unit 520                     | 50,000                                                                | D-2-4b(2)                                                   | 0520-020-001                                                 | D-2-5a                                                   | 0100-020-001                                         |
|                                                                     | Unit 600                     | 60,000                                                                | D-2-4b(2)                                                   | 0600-020-001                                                 | D-2-5b                                                   | 0100-020-001                                         |
|                                                                     | PROCESS TOTAL                | 110,000                                                               |                                                             |                                                              |                                                          |                                                      |
| Blending, Mixing, Bulking, and<br>Phase Separation (T50/T38)        | Unit 1400                    | 2,017,446                                                             | D-2-4b(1)<br>D-2-4b(2)                                      | 1400-020-001<br>1400-020-002<br>1400-020-003<br>1400-020-004 | D-2-5j                                                   | 0100-020-001                                         |
|                                                                     | PROCESS TOTAL                | 2,017,446                                                             |                                                             |                                                              |                                                          |                                                      |
| Reclamation and Recycling<br>(T35/T36/T38/T40/T44/T46/T47)          | Unit 900                     | 15,000                                                                | D-2-5g(4)                                                   | 0900-020-001                                                 | D-2-5g                                                   | 0100-020-001                                         |
| Stabilization and Debris Treatment<br>(T21/T22/T23/T24/T34/T39/T47) | Unit 1200A                   | 575,540                                                               | D-2-5i(5)<br>D-2-5i(6)                                      | 1200A-020-001<br>1200A-020-002<br>1200A-020-003              | D-2-5i                                                   | 0100-020-001                                         |
|                                                                     | PROCESS TOTAL                | 590,540                                                               |                                                             |                                                              |                                                          |                                                      |
| TOTAL TANK TREATMENT<br>CAPACITY                                    |                              | 2,717,986                                                             |                                                             |                                                              |                                                          |                                                      |

<sup>1</sup> Treatment process codes as defined in ADEM Admin. Code R. 335-14-5-Appendix I.

<sup>2</sup> The capacities listed herein do not include treatment of waste in containers (T04); treatment of waste en masse (T94); or treatment of wastes in miscellaneous units (T04) in these units.

<sup>3</sup> Location in application containing description (text), location (figure) of process/unit.

**PART V****MANAGEMENT IN CONTAINMENT BUILDINGS****V.A. PERMITTED OPERATIONS**

The Permittee may operate the units and processes described in Table V.1. and V.2. of this permit, subject to the terms of this permit. Operation of any process or unit not listed in Table V.1. and V.2. of this permit, operation of any process in a unit or area other than that for which the process is listed, or exceedance of any capacity listed therein, for the treatment, storage, or disposal of hazardous waste is prohibited.

**V.B. WASTE IDENTIFICATION**

1. The Permittee may store and treat the hazardous wastes listed in Part A (Section A) of the permit application in containment buildings at the facility, subject to the terms of this permit. The storage or treatment of any hazardous waste not listed in Part A (Section A) of the permit application is prohibited.
2. The Permittee shall not store or treat mixed waste in containment buildings at the facility.

**V.C. STORAGE IN CONTAINMENT BUILDINGS**

1. The Permittee shall comply with the containment building storage capacity restrictions listed in Table V.1. of this permit.
2. The Permittee shall maintain and operate the containment building storage areas in accordance with the procedures specified in Section D-9-3 of the permit application and as required by ADEM Admin. Code R. 335-14-5-.30(2)(c).
3. The Permittee shall ensure all areas used for the storage of waste are in good condition and are of sufficient structural integrity and composition to allow for the safe storage of the waste(s) managed.

**V.D. TREATMENT IN CONTAINMENT BUILDINGS**

1. The Permittee shall comply with the containment building treatment process and capacity restrictions listed in Table V.2. of this permit.
2. The Permittee shall maintain and operate the containment building processing areas in accordance with the procedures specified in Section D-9-4 of the permit application and as required by ADEM Admin. Code R. 335-14-5-.30(2)(c).
3. The Permittee shall ensure all areas used for the treatment of waste are in good condition and are of sufficient structural integrity and composition to allow for the safe treatment of the waste(s) managed.
4. The Permittee shall not substitute dilution of hazardous wastes for treatment, except as allowed by ADEM Admin. Code R. 335-14-9-.01(3).

5. The Permittee shall ensure that the treatment process(es) utilized complies with any and all regulatory requirements promulgated by ADEM and/or USEPA regarding the release of hazardous constituents to the environment.
6. The Permittee shall conduct the treatment process(es) in accordance with the procedures specified in Sections D-9-4, D-9-5, and D-9-6 of the permit application.
7. The Permittee shall not treat incompatible wastes or residues, other than as specifically described in Section D-9-4c of the permit application, in the same containment area. Whenever incompatible wastes or residues are treated in the same containment area, either in the same or subsequent batches, the Permittee shall comply with Condition V.J. of this permit.
8. The Permittee shall ensure that all chemical reactions have sufficiently occurred to prevent subsequent uncontrolled reactions before the process is stopped.
9. The Permittee shall manage all treatment residues in accordance with all applicable provisions of ADEM Admin. Code R. 335-13 and/or 335-14.
10. The Permittee shall enter records of all treatment activities, including hazardous waste numbers and descriptions, quantities, method(s) of treatment, and date(s) of treatment, into the operating record for each batch of waste treated.
11. Treatment conducted within a containment building shall be performed only in areas designed to prevent the release of liquids, wet materials, liquid aerosols, or other materials to other portions of the building, as required by ADEM Admin. Code R. 335-14-5-.30(2)(b)3.(ii).

#### **V.E. CONDITION OF CONTAINMENT BUILDINGS**

Throughout the active life of the containment building, if the Permittee detects a condition that could lead to or has caused a release of hazardous waste, the Permittee must repair the condition promptly, in accordance with the following procedures and the requirements of ADEM Admin. Code R. 335-14-5-.30(2)(c)3.

1. Upon detection of a condition that has led to a release of hazardous waste (*e.g.*, upon detection of leakage from the primary barrier), the Permittee must:
  - a. Enter a record of the discovery in the facility operating record;
  - b. Immediately remove the portion of the containment building affected by the condition from service;
  - c. Determine what steps must be taken to repair the containment building, remove any leakage from the secondary collection system, and establish a schedule for accomplishing the cleanup and repairs; and
  - d. Within seven days after the discovery of the condition, notify the Department of the condition, and within 14 working days, provide a written notice to the Department with a description of the steps taken to repair the containment building, and the schedule for accomplishing the work.
2. The Department will review the information submitted, make a determination regarding whether the containment building must be removed from service completely or partially

until repairs and cleanup are completed, and notify the Permittee of the determination and the underlying rationale in writing.

3. Upon completing all repairs and cleanup, the Permittee must notify the Department in writing and provide a certification, signed by a qualified, registered professional engineer, that the repairs and cleanup have been completed according to the written plan submitted in accordance with Condition V.E.1.d. of this permit.
4. Upon detection of a condition that could lead to, but has not resulted in a release of hazardous waste, the Permittee must enter a record of the discovery and documentation of repairs into the facility operating record.

#### **V.F. INSTALLATION REQUIREMENTS**

The requirements of this Condition are applicable to all hazardous waste containment buildings located at the facility.

1. Each containment building must be constructed and maintained in accordance with the design specifications contained in Sections D-9-2 and D-9-6 of the permit application and the design standards required by ADEM Admin. Code R. 335-14-5-.30(2)(a) and (b).
2. Each containment building must have a written certification by a qualified, registered (in the state of Alabama) professional engineer, in accordance with ADEM Admin. Code R. 335-14-8-.02(2)(d), that the containment building is designed and constructed in accordance with the requirements of ADEM Admin. Code R. 335-14-5-.30(2).
3. The Permittee shall maintain the certification(s) required by Condition V.F.2. of this permit in the operating record, and include a copy of the certification with the certification of construction required by Condition I.C.13. of this permit.

#### **V.G. GENERAL OPERATING REQUIREMENTS**

1. The Permittee shall operate and maintain all containment buildings as required by ADEM Admin. Code R. 335-14-5-.30 and as described in Sections D-9-3, D-9-4, and D-9-5 of the permit application.
2. The Permittee shall use all controls and practices necessary to ensure containment of the hazardous waste within the unit.
3. The Permittee shall maintain the primary barrier and wear surfaces of the containment buildings to be free of significant cracks, gaps, or other deterioration in accordance with the requirements of ADEM Admin. Code R. 335-14-5-.30(2)(c)1.(i) , and as specified in Section D-9-2b of the permit application..
4. The Permittee shall maintain the liquid collection and removal system so as to minimize the accumulation of liquid on the primary barrier of the containment building, as described in Section D-9-3e of the permit application, and in accordance with the requirements of ADEM Admin. Code R. 335-14-5-.30(2)(b)2.
5. The Permittee shall maintain the secondary containment systems of the containment building as described in Section D-9-2c of the permit application and in accordance with the requirements of ADEM Admin. Code R. 335-14-5-.30(2)(b)3.

6. The Permittee shall prevent the release of liquids or wet materials into areas without secondary containment, as required by ADEM Admin. Code R. 335-14-5-.30(2)(d).
7. The Permittee shall not allow hazardous waste to be stored or treated in a containment building at a height which exceeds the height of any containment wall(s) surrounding the waste, as required by ADEM Admin. Code R. 335-14-5-.30(2)(c)1.(ii) and as specified in Section D-9-3i of the permit application.
8. The Permittee shall prevent tracking of hazardous wastes and hazardous constituents out of the containment areas by personnel or equipment, as required by ADEM Admin. Code R. 335-14-5-.30(2)(c)1.(iii) and as specified in Section D-9-4f of the permit application.
9. The Permittee shall operate and maintain emissions controls to prevent fugitive emissions in accordance with ADEM Admin. Code R. 335-14-5-.30(2)(c)1.(iv) and as specified in Section D-9-4g of the permit application.
10. The Permittee shall maintain an impervious coating which is free of cracks, gaps, or other deterioration on all containment system surfaces which may be exposed to hazardous wastes or hazardous constituents (or releases of hazardous constituents).

#### **V.H. INSPECTIONS**

The Permittee shall inspect all containment buildings, associated monitoring equipment, and surrounding areas at least once every seven days to detect signs of releases of hazardous waste, as specified in Section D-9-3j of the permit application, and as required by ADEM Admin. Code R. 335-14-5-.30(2)(c)4.

#### **V.I. SPECIAL REQUIREMENTS FOR IGNITABLE OR REACTIVE WASTES**

The Permittee shall take precautions to prevent accidental ignition or reaction of ignitable or reactive waste and follow the procedures specified in Section D-9-3g of the permit application and as required by ADEM Admin. Code R. 335-14-5-.02(8).

#### **V.J. SPECIAL REQUIREMENTS FOR INCOMPATIBLE MATERIALS**

1. Prior to placing incompatible wastes, treatment reagents, or other materials in the same containment building, the Permittee shall comply with ADEM Admin. Code R. 335-14-5-.02(8).
2. The Permittee shall assure that the ability of the containment building to contain the waste is not impaired. Incompatible hazardous waste, treatment reagents, or other materials shall not be placed in the containment building or its secondary containment system if they could cause the unit or secondary containment to leak, corrode, or otherwise fail. (ADEM Admin. Code R. 335-14-5-.30(2)(a)3.)
3. The Permittee must document compliance with Conditions V.J.1. and V.J.2. of this permit as required by ADEM Admin. Code R. 335-14-5-.05(4) and place the documentation in the operating record.

**V.K. CLOSURE**

1. The Permittee shall close the containment buildings following the receipt of the final volume of hazardous waste and in accordance with the requirements of the Closure Plan, Section I of the permit application, and Rules 335-14-5-.07(2) and 335-14-5-.30(3) of the ADEM Administrative Code.
2. If at closure not all waste and contaminated structures and soils at a unit can be removed or decontaminated, the Permittee shall close the containment building as a landfill and perform post-closure care as specified in ADEM Admin. Code R. 335-14-5-.30(3)(b) and 335-14-5-.14(11).

**TABLE V.1.**  
**STORAGE IN CONTAINMENT BUILDINGS (S06)**

| UNIT NAME                                         | CONTAINMENT<br>AREA | PERMITTED<br>STORAGE<br>CAPACITY<br>(gallons) [cubic yards <sup>1</sup> ] | DESCRIPTION<br>OF UNIT<br>(Section <sup>2</sup> ) | LOCATION<br>OF UNIT<br>(Figure <sup>2</sup> ) |
|---------------------------------------------------|---------------------|---------------------------------------------------------------------------|---------------------------------------------------|-----------------------------------------------|
| Unit 1200A                                        | Area 1              | 150,146 [743]                                                             | D-9-6b                                            | 0100-020-001                                  |
| UNIT TOTAL                                        |                     | 150,146 [743]                                                             |                                                   |                                               |
| TOTAL CONTAINMENT<br>BUILDING STORAGE<br>CAPACITY |                     | 150,146 [743]                                                             |                                                   |                                               |

<sup>1</sup> Approximate value. One cubic yard equals 202.0 gallons.

<sup>2</sup> Location in application containing description (text), location (figure) of unit.

**TABLE V.2.**  
**TREATMENT IN CONTAINMENT BUILDINGS (T94)**

| <b>TREATMENT<br/>PROCESS (Code<sup>4</sup>)</b>     | <b>UNIT(S)<br/>PERMITTED</b> | <b>PERMITTED<br/>TREATMENT<br/>CAPACITY<sup>1</sup><br/>(cu. yds./day)</b> | <b>DESCRIPTION<br/>OF PROCESS<br/>(Section<sup>2</sup>)</b> | <b>LOCATION<br/>OF PROCESS<br/>(Figure<sup>2</sup>)</b>             | <b>DESCRIPTION<br/>OF UNIT<br/>(Section<sup>2</sup>)</b> | <b>LOCATION<br/>OF UNIT<br/>(Figure<sup>2</sup>)</b> |
|-----------------------------------------------------|------------------------------|----------------------------------------------------------------------------|-------------------------------------------------------------|---------------------------------------------------------------------|----------------------------------------------------------|------------------------------------------------------|
| T94 <sup>3</sup>                                    | Unit 1200A                   | 743                                                                        | D-9-6b(3)                                                   | 1200A-020-001,<br>1200A-020-002;<br>1200A-020-003,<br>1200A-020-004 | D-9-6b                                                   | 0100-020-001                                         |
| TOTAL CONTAINMENT<br>BUILDING TREATMENT<br>CAPACITY |                              | 743                                                                        |                                                             |                                                                     |                                                          |                                                      |

<sup>1</sup> The capacities listed herein do not include treatment of waste in containers (T04); treatment of waste in tanks (T01) or treatment of waste in miscellaneous units (T04) in these units.

<sup>2</sup> Location in application containing description (text), location (figure) of process/unit.

<sup>3</sup> T94 (Treatment in Containment Buildings) includes the treatment processes and treatment process codes<sup>4</sup> identified in Section D-9-5 of the permit application.

<sup>4</sup> Treatment process codes as defined in ADEM Admin. Code R. 335-14-5-Appendix I.

**PART VI****MANAGEMENT IN MISCELLANEOUS UNITS****VI.A. PERMITTED OPERATIONS**

The Permittee may operate the units and processes described in Table VI.1. of this permit, subject to the terms of this permit. Operation of any process or unit not listed in Table VI.1. of this permit, operation of any process in a unit or area other than that for which the process is listed, or exceedance of any capacity listed therein, for the treatment, storage, or disposal of hazardous waste is prohibited.

**VI.B. WASTE IDENTIFICATION**

1. The Permittee may treat only solid hazardous wastes listed in Part A (Section A) of the permit application, with the processes listed in Table VI.1. of this permit, subject to the terms of this permit. The storage or treatment of any hazardous waste not listed in Part A (Section A) of the permit application is prohibited.
2. The Permittee shall not store or treat mixed waste in miscellaneous units at the facility.

**VI.C. TREATMENT IN MISCELLANEOUS UNITS**

1. The Permittee shall comply with the miscellaneous unit treatment process and capacity restrictions listed in Table VI.1. of this permit, and Sections D-1, D-2, and D-9 of the permit application.
2. The Permittee shall ensure all areas used for the treatment of waste are in good condition and are of sufficient structural integrity and composition to allow for the safe treatment of the waste(s) managed.
3. The Permittee shall not substitute dilution of hazardous wastes for treatment, except as allowed by ADEM Admin. Code R. 335-14-9-.01(3).
4. The Permittee shall ensure that the treatment process(es) utilized complies with any and all regulatory requirements promulgated by ADEM and/or USEPA regarding the release of hazardous constituents to the environment.
5. The Permittee shall conduct the treatment process(es) in accordance with the procedures specified in Sections D-1, D-2, and D-9 of the permit application.
6. The Permittee shall not treat incompatible wastes or residues, other than as specifically described in Sections D-1-1a(11), D-1-1c(3), D-2-2f, D-2-3e, D-9-3f, and D-9-4c of the permit application, in the same containment area. Whenever incompatible wastes or residues are treated in the same containment area, either in the same or subsequent batches, the Permittee shall comply with Condition VI.G. of this permit.
7. The Permittee shall ensure that all chemical reactions have sufficiently occurred to prevent subsequent uncontrolled reactions before the process is stopped.
8. The Permittee shall manage all treatment residues in accordance with all applicable provisions of ADEM Admin. Code R. 335-13 and/or 335-14.

9. The Permittee shall enter records of all treatment activities, including hazardous waste numbers and descriptions, quantities, method(s) of treatment, and date(s) of treatment, into the operating record for each batch of waste treated.

#### **VI.D. CONTAINMENT**

The Permittee shall maintain the containment systems of the miscellaneous treatment areas in accordance with the requirements of ADEM Admin. Code R. 335-14-5-.09(6)(b) , and as specified in Sections D-1, D-2, and D-9 of the permit application.

#### **VI.E. INSPECTIONS**

The Permittee shall inspect areas where containers are stored or handled as specified in Sections D-1-1c(5), D-2-3h, D-9-3j, and D-9-4d of the permit application and as required by ADEM Admin. Code R. 335-14-5-.09(5).

#### **VI.F. SPECIAL REQUIREMENTS FOR IGNITABLE OR REACTIVE WASTES**

The Permittee shall comply with the requirements specified in Sections D-1-1a(12), D-1-1c(4), D-2-2f, D-2-3d, and D-9-3g of the permit application and ADEM Admin. Code R. 335-14-5-.09(7) and 335-14-5.02(8).

#### **VI.G. SPECIAL REQUIREMENTS FOR INCOMPATIBLE WASTES**

The Permittee shall comply with the requirements specified in Sections D-1-1a(11), D-1-1c(3), D-2-2f, D-2-3e, and D-9-3f of the permit application and ADEM Admin. Code R. 335-14-5-.09(8).

#### **VI.H. CLOSURE**

1. Following the receipt of the final volume of waste, the Permittee shall close the miscellaneous unit treatment areas in accordance with the requirements of the Closure Plan in Section I of the permit application, and ADEM Admin. Code Rules 335-14-5-.07(2) and 335-14-5-.09(9).
2. If at closure not all waste and contaminated structures and soils at a unit can be removed or decontaminated, the Permittee shall close the container storage or treatment unit as a landfill and perform post-closure care as specified in ADEM Admin. Code R. 335-14-5-.09(9)(b) and 335-14-5-.14(11).

TABLE VI.1.

## TREATMENT IN MISCELLANEOUS UNITS (T04)

| TREATMENT<br>PROCESS (Code <sup>1</sup> )     | UNIT(S)<br>PERMITTED | TYPE OF<br>UNIT       | PERMITTED<br>TREATMENT<br>CAPACITY <sup>2</sup> | DESCRIPTION<br>OF PROCESS<br>(Section <sup>3</sup> ) | LOCATION<br>OF PROCESS<br>(Figure <sup>3</sup> ) | DESCRIPTION<br>OF UNIT<br>(Section <sup>3</sup> ) | LOCATION<br>OF UNIT<br>(Figure <sup>3</sup> ) |
|-----------------------------------------------|----------------------|-----------------------|-------------------------------------------------|------------------------------------------------------|--------------------------------------------------|---------------------------------------------------|-----------------------------------------------|
| CTR <sup>4</sup> (T38/T47/T50)                | Unit 700             | Tipper/<br>Repackager | 26,400 gal/day                                  | D-1-2g(2)                                            | 0700-020-002                                     | D-1-2g                                            | 0100-020-001                                  |
| Physical Processing<br>(T47)                  | Unit 700             | Shredder              | 120 tons/hour                                   | D-1-2g(2)                                            | 0700-020-002                                     | D-1-2g                                            | 0100-020-001                                  |
|                                               | Unit 1200A           | Shredder              | 240 tons/hour                                   | D-2-5i                                               | 1200A-020-002                                    | D-2-5i                                            | 0100-020-001                                  |
|                                               | PROCESS TOTAL        |                       | 840 tons/hour                                   |                                                      |                                                  |                                                   |                                               |
| Mechanical Stabilization<br>(T21/T22/T23/T24) | Unit 1200A           | Stabilization         | 383,000 gal/day                                 | D-2-5i(6)                                            | 1200A-020-001                                    | D-2-5i                                            | 0100-020-001                                  |
|                                               | PROCESS TOTAL        |                       | 383,000 gal/day                                 |                                                      |                                                  |                                                   |                                               |

<sup>1</sup> Treatment process codes as defined in ADEM Admin. Code R. 335-14-5-Appendix I.

<sup>2</sup> The capacities listed herein do not include treatment of wastes in containers (T04); treatment of waste in tanks (T01) or treatment of waste en masse (T94) in these units.

<sup>3</sup> Location in application containing description (text), location (figure) of process/unit.

<sup>4</sup> CTR = Decanting, blending, bulking, and mixing in the Container Tipper Repackager.

**PART VII****MANAGEMENT IN LANDFILLS****VII.A. PERMITTED OPERATIONS**

The Permittee may operate the units and processes described in Table VII.1. of this permit, subject to the terms of this permit. Operation of any process or unit not listed in Table VII.1. of this permit, operation of any process in a unit or area other than that for which the process is listed, or exceedance of any capacity listed therein, for the treatment, storage, or disposal of hazardous waste is prohibited.

**VII.B. WASTE IDENTIFICATION**

1. The Permittee may dispose of the hazardous wastes listed in Part A (Section A, Appendix A-1) of the permit application in landfills at the facility, subject to the terms of this permit. The disposal of any hazardous waste not listed in Part A (Section A, Appendix A-1) of the permit application is prohibited.
2. The Permittee is prohibited from disposing of any hazardous waste in landfills which does not meet all applicable treatment standards.
3. The Permittee shall not dispose of mixed waste in landfills at the facility.

**VII.C. DISPOSAL IN LANDFILLS**

1. The Permittee shall comply with the landfill disposal capacity restrictions listed in Table VII.1. of this permit.
2. The Permittee shall maintain and operate the landfills in accordance with the procedures specified in Section D-6 of the permit application.

**VII.D. DESIGN AND OPERATING REQUIREMENTS**

The Permittee shall operate all landfills as described in Attachment D-6-1-1 of the permit application, and as required under ADEM Admin. Code ADEM Admin. Code R. 335-14-5-.14(2). In addition, the Permittee shall design and operate all landfills in accordance with the following conditions:

1. The Permittee shall install two liners and associated leachate collection and removal systems (one above the primary liner and one between the liners) for each cell, in accordance with the design plans and reports contained in Section D-6 of the permit application and as required by ADEM Admin. Code R. 335-14-5-.14(2)(b).
2. Collected leachate must be managed in accordance with the design plans and reports contained in Section D-6 of the permit application.
3. The Permittee shall locate, construct, operate, and maintain all landfills as specified in Section D-6 of the permit application, so as to prevent the migration of any hazardous constituent into the groundwater or surface water, at least as

effectively as the liners and leachate collection and removal systems outlined in ADEM Admin. Code R. 335-14-5-.14(2).

4. The Permittee shall construct, operate, and maintain the leachate collection and removal systems as described in Section D-6 of the permit application.
  - a. The Permittee shall not allow leachate to accumulate to a depth of more than one foot over the liner of each landfill cell, in accordance with the requirements of ADEM Admin. Code R. 335-14-5-.14(2)(b)2. and as described in Attachment D-6-1-1-3 and D-6-1-1-7c of the permit application. The Permittee shall record the leachate level in each leachate collection sump and each leak detection sump at least once each week during the active life and closure period of each landfill unit.
  - b. The Permittee shall operate the leak detection system in accordance with the requirements of ADEM Admin. Code R. 335-14-5-.14(2)(b)3., 335-14-5-.14(2)(b)4., and 335-14-5-.14(2)(b)5., and as described in Attachment D-6-1-1-3a of the permit application so as to minimize the head on the bottom liner of each landfill cell.
  - c. The Permittee shall construct, operate, and maintain the pressure relief systems for the landfills as described in Attachment D-6-1-1-2 of the permit application.
  - d. The Permittee shall comply with the action leakage rate requirements of ADEM Admin. Code R. 335-14-5-.14(3), as described in Attachment D-6-1-6 of the permit application. The action leakage rates for each landfill cell are as listed in Table VII.1. of this permit.
  - e. The Permittee shall record, at least once each week, the amount of liquids removed from each leachate collection sump and from each leak detection sump during the active life and closure period of each landfill unit. (ADEM Admin. Code R. 335-14-5-.14(4)(c))
  - f. [RESERVED].
5. The Permittee shall design, construct, operate, and maintain a run-on control system in accordance with the design plans, specifications and operating practices contained in Section D-6 of the permit application and as required by ADEM Admin. Code R. 335-14-5-.14(2)(c).
6. The Permittee shall design, construct, operate, and maintain a run-off control system in accordance with the design plans, specifications and operating practices contained in Section D-6 of the permit application. (ADEM Admin. Code R. 335-14-5-.14(2)(d)).
7. The Permittee shall prevent wind dispersal of hazardous wastes and hazardous constituents from the landfills as described in Attachment D-6-1-1-5 of the permit application and as required by ADEM Admin. Code R. 335-14-5-.14(2)(f).
8. All waste placed into the landfill shall be tested, prior to placement, in accordance with the Waste Analysis Plan as described in Section C-2 of the permit application and ADEM Admin. Code R. 335-14-5-.02(4).

9. If the flow rate into the leak detection system exceeds the action leakage rate set forth in Table VII.1. of this permit, the Permittee shall implement the response action plan contained in Attachment D-6-1-6 of the permit application. At a minimum, as required by ADEM Admin. Code R. 335-14-5-.14(5), the Permittee must:
- a. Notify the Department in writing of the exceedance within seven days of the determination;
  - b. Submit a preliminary written assessment to the Department within 14 days of the determination, as to the amount of liquids, likely sources of liquids, possible location, size, and cause of any leaks, and short-term actions taken and planned;
  - c. Determine to the extent practicable the location, size, and cause of any leak;
  - d. Determine whether waste receipt should cease or be curtailed, whether any waste should be removed from the unit for inspection, repairs, or controls, and whether or not the unit should be closed;
  - e. Determine any other short-term and longer-term actions to be taken to mitigate or stop any leaks; and
  - f. Within 30 days after the notification that the action leakage rate has been exceeded, submit to the Department the results of the analyses specified in Conditions VII.D.9.c., VII.D.9.d., and VII.D.9.e. of this permit, the results of actions taken, and actions planned. Monthly thereafter, as long as the flow rate in the leak detection system exceeds the action leakage rate, the Permittee must submit to the Department a written report summarizing the results of any remedial actions taken and actions planned.
  - g. To make the leak and/or remediation determinations required by Conditions VII.D.9.c., VII.D.9.d., and VII.D.9.e. of this permit, the Permittee must:
    - i.
      - (I) Assess the source(s) of liquids and amounts by source;
      - (II) Conduct a fingerprint, hazardous constituent, or other analyses of the liquids in the leak detection system to identify the source(s) of liquids and possible location(s) of any leaks, and the hazard and mobility of the liquid; and
      - (III) Assess the seriousness of any leaks in terms of potential for escaping into the environment; or
    - ii. Document why the assessments required by Condition VII.D.9.g.i. of this permit are not necessary.
10. The Permittee shall install sand windows in the protective soil layer above the liner system of each landfill cell, beginning with Cell 1 of Trench 22, which allow leachate and liquids to pass through the protective soil layer into the

underlying leachate collection and removal system. The sand windows shall be designed, spaced, constructed, operated, and maintained as described in Section D-6, Exhibit D-6-1-1a of the permit application.

11. The Permittee shall remove all sacrificial barrier liners (which provide UV or other protection to the sideslope liner system), sand window covers, and other similar materials immediately prior to covering the affected area(s) with wastes or other materials (*e.g.*, soil, chalk), as described in Appendix D-6-1 of the permit application. The Permittee may leave in-place sacrificial liners consisting of materials that do not impede water/leachate movement toward the permanent liner/leachate collection system(s) (*e.g.*, woven or non-woven geofabrics and geo-textiles).
12. Where necessary to temporarily divide individual landfill cells during the initial stages of disposal within the cell, the Permittee shall construct, operate, and remove intermediate berms as described in Section D-6, Exhibit D-6-1-1a of the permit application. The entire bottom lift of each such berm must be completely removed prior to placement of waste on the open side of the berm.
13. The Permittee shall manage macro-encapsulated wastes in the landfill as described in Section D-6, Attachment D-6-1-1-6e of the permit application. All macro-encapsulation units (boxes) shall comply with the requirements of ADEM Admin. Code R. 335-14-9-.04(6) [40 CFR 268.45]. Specifically,
  - a. All macro-encapsulation units shall be filled to at least 90% of their capacity, with all void spaces filled to the maximum extent practicable.
  - b. All macro-encapsulation units shall be sealed prior to placement in the landfill.
  - c. All macro-encapsulation units shall be handled so as to prevent breaking, puncturing, tearing, unsealing, or otherwise compromising the integrity of the outer containment of the device.
  - d. The Permittee shall visually inspect all macro-encapsulation units after placement in the landfill prior to covering with waste or other materials.
  - e. In the event a macro-encapsulation unit is broken, punctured, torn, unsealed, or otherwise damaged before or during placement, or as a result of disposal, excavation, or other activities in the landfill, the Permittee shall remove and re-treat any spilled material, and shall repair the macro-encapsulation unit prior to covering with waste or other material. If a repair can be accomplished without removing the macro-encapsulation unit from the landfill, the repair may be performed within the landfill unit. If a macro-encapsulation unit is unrepairable, the waste may be transferred into another macro-encapsulation unit while within the landfill unit.
14. All precipitation which falls into a landfill and contacts hazardous waste or other disposed materials (*e.g.*, non-hazardous waste, daily cover materials, *etc.*) must be managed as hazardous waste leachate (EPA Hazardous Waste Number F039). Any precipitation which is collected prior to contact with hazardous waste or other disposed materials may be managed in accordance with the applicable requirements of the Permittee's NPDES discharge permit (Permit No.

AL0050580) issued by the Department. The Permittee may solidify, in-place (on the surface), precipitation that comes in contact with landfill waste prior to it reaching the leachate detection sump, provided that dust emissions are controlled.

15. The Permittee shall inspect and maintain all temporary covers to detect, repair, and prevent damage to the temporary cover and exposure of hazardous waste or hazardous constituents to precipitation or wind dispersal due to erosion or other factors.

#### **VII.E. INSPECTION SCHEDULES**

The Permittee shall inspect all landfills in accordance with the following conditions:

1. The Permittee shall inspect the liners and cover systems during construction and installation for uniformity, damage and imperfections (*e.g.*, holes, cracks, thin spots or foreign materials). (ADEM Admin. Code R. 335-14-5-.14(4)(a))
2. The Permittee shall inspect all new landfill cells immediately after construction or installation for the following: (ADEM Admin. Code R. 335-14-5-.14(4)(a))
  - a. Synthetic liners and covers must be inspected to ensure tight seams and joints and the absence of tears, punctures or blisters.
  - b. Soil-based and admixed liners and covers must be inspected for imperfections including lenses, cracks, channels, root holes, or other structural non-uniformities that may cause an increase in the permeability of the liner or cover.
3. The Permittee shall inspect all constructed systems (*e.g.*, bottom liners, sand windows, sidewall liners, *etc.*) immediately prior to covering to insure that the subject system has not been compromised (*e.g.*, rips, tears, UV degradation, silting of sand or fabrics, *etc.*).
4. The Permittee shall inspect all landfills (including the liner, leachate collection system, temporary covers, and final cover systems) in accordance with Attachment D-6-1-1 of the permit application and Condition VII.E.5. of this permit. (ADEM Admin. Code R. 335-14-5-.02(6))
5. The landfill must be inspected weekly and after storms to detect evidence of the following: (ADEM Admin. Code R. 335-14-5-.14(4)(b))
  - a. Deterioration, malfunctions, or improper operation of run-on and run-off systems;
  - b. The presence of leachate in, and proper functioning of, leachate collection and removal systems; and
  - c. The proper functioning of wind dispersal control systems.

#### **VII.F. CELL LOCATION SURVEYING**

The Permittee shall maintain the following items in the operating record as required by ADEM Admin. Code R. 335-14-5-.05(4) and 335-14-5-.14(10):

1. A map with the exact location and dimensions (including depth and top and bottom elevations) of each cell with respect to permanently surveyed benchmarks; and
2. The types of waste in each cell and the approximate location of each hazardous waste shipment within each cell.

**VII.G. SPECIAL LANDFILL PROVISIONS FOR IGNITABLE OR REACTIVE WASTES**

The Permittee shall not place ignitable or reactive waste in any landfill cell, except as provided by ADEM Admin. Code R. 335-14-5-.14(13).

**VII.H. SPECIAL LANDFILL PROVISIONS FOR INCOMPATIBLE WASTES**

The Permittee shall not place incompatible wastes, or incompatible wastes and materials, in the same landfill cell, except as provided by ADEM Admin. Code R. 335-14-5-.14(14).

**VII.I. SPECIAL LANDFILL PROVISIONS FOR HAZARDOUS WASTES RESTRICTED FROM LANDFILL UNITS**

1. The Permittee shall not place any hazardous waste(s) which is prohibited from land disposal, or which does not meet all applicable land disposal restrictions (LDR) treatment standards (as listed in ADEM Admin. Code R. 335-14-9 [40 CFR 268]), in any landfill cell.
2. The Permittee shall not dispose of any F020, F021, F022, F023, F026, F027, or F028 listed hazardous waste(s) in any landfill unit, except in a form (*e.g.*, incineration residues) which meets all applicable requirements of ADEM Admin. Code R. 335-14-9, pursuant to ADEM Admin. Code R. 335-14-5-.14(18).

**VII.J. SPECIAL LANDFILL PROVISIONS FOR LIQUID WASTES**

1. The Permittee shall not place bulk or non-containerized liquid wastes, or waste containing free liquids, in any landfill unit, in accordance with ADEM Admin. Code R. 335-14-5-.14(15)(b). [Note: The application of non-contaminated water or leachate treated to F039 standards for dust control purposes within the landfill is not prohibited by this permit condition.]
2. The Permittee shall demonstrate the absence of free liquids in all containerized or bulk waste which is suspected (by the Permittee or the Department) to contain free liquids. This demonstration shall be made by the following test: "Method 9095 (Paint Filter Liquid Test)" as described in "Test Methods for Evaluating Solid Wastes, Physical/Chemical Methods" (EPA Publication No. SW-846, as incorporated by reference in ADEM Admin. Code R. 335-14-1-.02(2)).
3. Containers holding free liquids shall not be placed in any landfill unit unless the requirements of ADEM Admin. Code R. 335-14-5-.14(15)(d) are met.
4. All sorbents used to treat free liquids (whether containerized or non-containerized) to be disposed of in the landfill shall be non-biodegradable, and

shall comply with the requirements of ADEM Admin. Code R. 335-14-5-.14(15)(e).

5. The Permittee shall not dispose of any liquid which is not a hazardous waste in any landfill unit, except as provided in ADEM Admin. Code R. 335-14-5-.14(15)(f).

#### **VII.K. SPECIAL LANDFILL PROVISIONS FOR CONTAINERS**

1. Except as provided in Condition VII.K.3. of this permit, the Permittee shall not dispose of any containers in any landfill that are larger than ampules unless they are filled at least 90% full or are crushed, shredded or similarly reduced in volume to the maximum practical extent before placement in the landfill. (ADEM Admin. Code R. 335-14-5-.14(16))
2. The Permittee shall not dispose of small containers of hazardous waste in overpacked drums (*i.e.*, lab packs), except as provided by ADEM Admin. Code R. 335-14-5-.14(17).
3. The Permittee may place empty containers in a landfill unit provided each such container is crushed to the maximum practical extent before burial, in accordance with the provisions of ADEM Admin. Code R. 335-14-5-.14(16)(b).

#### **VII.L. DISPOSAL APPROVAL REQUIREMENTS**

1. The Permittee shall not dispose of any waste for which all of the applicable requirements of ADEM Admin. Code R. 335-14-3-.08 are not met, in accordance with the requirements of ADEM Admin. Code R. 335-14-5-.25.
2. The Permittee shall maintain all disposal approval notification documents required by Condition VII.L.1. of this permit as required by ADEM Admin. Code R. 335-14-5-.25(1)(b).

#### **VII.M. REPORTING REQUIREMENTS**

The Permittee shall submit written reports to the Department, beginning within 60 days after the first anniversary of the effective date of this permit, and within 60 days after each subsequent anniversary, which include:

1. All data collected in accordance with Conditions VII.D.4.a. and VII.D.4.e. of this permit;
2. The total tonnage, by major waste category (*e.g.*, RCRA, TSCA, CERCLA, non-hazardous, *etc.*), of waste disposed each calendar month of the preceding year; and
3. For the first annual report only, the tabulated results of all leachate analyses conducted prior to the effective date of this permit.

#### **VII.N. CLOSURE AND POST-CLOSURE CARE**

The Permittee shall conduct closure and post-closure activities in accordance with the following conditions:

1. The Permittee shall close each landfill following the receipt of the final volume of hazardous waste and in accordance with the closure plan in Section I of the permit application and the requirements of ADEM Admin. Code Rules 335-14-5-.07 and 335-14-5-.14 (11). Until plant growth has been established on the cap(s), the topsoil shall be stabilized through chemical or physical means to prevent erosion.
2. The Permittee shall monitor and maintain each landfill in accordance with the post-closure plan in Section I of the permit application and ADEM Admin. Code R. 335-14-5-.07 [(8) through (11)] and 335-14-5-.14(11) and Part VIII of this permit.

**TABLE VII.1.**  
**DISPOSAL IN LANDFILL (D80)**

| UNIT NAME                           | PERMITTED<br>DISPOSAL CAPACITY<br>(acre-feet<br>[cubic yards <sup>1</sup> ]) | ACTION<br>LEAKAGE<br>RATE<br>(gal/acre-day)                  | DESCRIPTION<br>OF UNIT<br>(Section <sup>2</sup> ) | LOCATION<br>OF UNIT<br>(Figure <sup>2</sup> ) |
|-------------------------------------|------------------------------------------------------------------------------|--------------------------------------------------------------|---------------------------------------------------|-----------------------------------------------|
| Trench 22                           | 3,260 [5,259,358]                                                            | Cell 1 - 138<br>Cell 2 - 128<br>Cell 3 - 126<br>Cell 4 - 143 | D-6-2, D-6-3                                      | 0100-020-001                                  |
| TOTAL LANDFILL DISPOSAL<br>CAPACITY | 3,260 [5,259,358]                                                            |                                                              |                                                   |                                               |

<sup>1</sup> One acre-foot equals 1613.3 cubic yards.

<sup>2</sup> Location in application containing description (text), location (figure) of unit.

## PART VIII

### POST-CLOSURE CARE

#### VIII.A. POST-CLOSURE CARE PERIOD

The post-closure care period shall extend for a period of thirty (30) years after the date of acceptance of certification of closure of the last operational unit at the facility, unless shortened or extended pursuant to ADEM Admin. Code Rule 335-14-5-.07(8). The post-closure care period shall automatically extend through the end of the compliance period specified in Condition IX.B.4. of this permit.

#### VIII.B. POST-CLOSURE PROCEDURES AND USE OF PROPERTY

##### 1. Post-Closure Activities

The Permittee shall conduct post-closure care activities, in accordance with Section I of the permit application and as required by ADEM Admin. Code Rules 335-14-5-.07 and 335-14-5-.14(11)(d), for each hazardous waste management unit listed in Table VIII.1. Post-closure care shall commence upon the effective date of this permit, and shall continue throughout the post-closure care period.

##### 2. Security

The Permittee shall comply with the security provisions of ADEM Admin. Code Rule 335-14-5-.02(5)(b) and (c) as described in Section I of the permit application.

##### 3. Disturbance of Closed Unit(s)

The Permittee shall not allow the disturbance of 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 for any unit identified in Condition VIII.A.

##### 4. The Permittee shall:

- a. Maintain the integrity and effectiveness of the landfills' final cover, including making repairs to the cap, as necessary, to correct the effects of settling, subsidence, erosion, or other events;
- b. Maintain and monitor the groundwater monitoring system and comply with all other applicable requirements of ADEM Admin. Code Rule 335-14-5-.06 and Part IX of this permit;
- c. Prevent run-on and run-off from eroding or otherwise damaging the final cover; and,
- d. Protect and maintain surveyed benchmarks used in complying with the surveying and recordkeeping requirements of ADEM Admin. Code Rule 335-14-5-.14(10).

##### 5. The Permittee shall operate and maintain the leachate collection, removal, and leak detection systems of all landfill units whose construction includes synthetic bottom

liners (e.g., T-19, T-21, T-22, et seq.) throughout the post-closure period, as required by ADEM Admin. Code Rule 335-14-5-.14(11)(d), and as described in Section I of the permit application.

- a. The Permittee shall not allow leachate to accumulate to a depth of more than one foot over the liner of each landfill cell, in accordance with the requirements of ADEM Admin. Code Rules 335-14-5-.14(2)(b)2. and 335-14-5-.14(11)(d), and as described in Section I and Attachment D-6-1-1-3 of Section D-6 of the permit application. Except as provided in Condition VIII.B.5.d. of this permit, the Permittee shall record the leachate level in each leachate collection sump and each leak detection sump at least once each month during the post-closure care period of each landfill unit.
  - b. The Permittee shall operate the leak detection system in accordance with the requirements of ADEM Admin. Code Rules 335-14-5-.14(2)(b)3., 335-14-5-.14(2)(b)4., 335-14-5-.14(2)(b)5., and 335-14-5-.14(11)(d), and as described in Section D-6 and Section I of the permit application so as to minimize the head on the bottom liner of each landfill cell.
  - c. The Permittee shall comply with the action leakage rate requirements of ADEM Admin. Code Rule 335-14-5-.14(3), as described in Section D-6 of the permit application. The action leakage rates for each landfill cell are as listed in Table VII.1. of this permit.
  - d. After the certification of closure of a landfill unit has been accepted by the Department in accordance with ADEM Admin. Code Rule 335-14-5-.07(6), the Permittee shall record the amount of liquids removed from each leachate collection sump and leak detection sump at least once each month throughout the post-closure care period for each landfill unit. If the liquid levels in all sumps of a landfill unit stay below the pump operating levels, as defined in ADEM Admin. Code Rule 335-14-5-.14(4)(c)3., for two consecutive months, the amount of liquids in the sumps must be recorded at least quarterly. If the liquid levels in the sumps stay below the pump operating levels for two consecutive quarters, the amount of liquids in the sumps must be recorded at least semi-annually. If at any time during the post-closure care period the pump operating level is exceeded at a landfill unit on a quarterly or semi-annually recording schedule, the Permittee must return to monthly recording of amounts of liquids removed from each sump of that landfill unit until the liquid levels again stay below the pump operating level for two consecutive months, as required by ADEM Admin. Code Rule 335-14-5-.14(4)(c)2.
  - e. [RESERVED].
6. If the flow rate into the leak detection system exceeds the action leakage rate set forth in Table VII.1. of this permit, the Permittee shall implement the response action plan contained in Section D-6 of the permit application. At a minimum, as required by ADEM Admin. Code Rule 335-14-5-.14(5), the Permittee must:
- a. Notify the Department in writing of the exceedance within seven (7) days of the determination;
  - b. Submit a preliminary written assessment to the Department within fourteen (14) days of the determination, as to the amount of liquids, likely source(s) of liquids,

- possible location, size, and cause of any leak(s), and short-term actions taken and planned;
- c. Determine to the extent practicable the location, size, and cause of any leak;
  - d. Determine whether any waste should be removed from the unit for inspection, repairs, or controls;
  - e. Determine any other short-term and longer-term actions to be taken to mitigate or stop any leaks; and
  - f. Within 30 days after the notification that the action leakage rate has been exceeded, submit to the Department the results of the analyses specified in Conditions VIII.B.8.c., VIII.B.6.d., and VIII.B.6.e. of this permit, the results of actions taken, and actions planned. Monthly thereafter, as long as the flow rate in the leak detection system exceeds the action leakage rate, the Permittee must submit to the Department a written report summarizing the results of any remedial actions taken and actions planned.
  - g. To make the leak and/or remediation determinations required by Conditions VIII.B.6.c., VIII.B.6.d., and VIII.B.6.e. of this permit, the Permittee must:
    - i.
      - (I) Assess the source of liquids and amounts by source;
      - (II) Conduct a fingerprint, hazardous constituent, or other analyses of the liquids in the leak detection system to identify the source of liquids and possible location of any leaks, and the hazard and mobility of the liquid; and
      - (III) Assess the seriousness of any leaks in terms of potential for escaping into the environment; or
    - ii. Document why the assessments required by Condition VIII.B.6.g.i. of this permit are not necessary.
7. The Permittee shall measure and record the depth of leachate in each leachate riser, well, leachate collection sump, or other similar device for each landfill unit whose construction does not include a synthetic bottom liner (e.g., T-8 through T-18, T-20) at least semi-annually throughout the post-closure care period for each unit. This schedule shall begin within 120 days after the effective date of this permit.
  8. [RESERVED].
  11. The Permittee shall provide the Department with a revised written report, subject to approval by the Department, presenting all data collected and/or considered as a part of the study and detailing the alternatives evaluated and the results of the evaluation including the recommended alternative, within 180 days after the effective date of this permit. After approval of the report by the Department the Permittee shall, within 180 days, prepare and submit an implantation plan, in the form of a corrective measures work plan, addressing the approved recommended alternative.
  12. [RESERVED].

### 13. Reporting Requirements

The Permittee shall submit reports to the Department, beginning within 60 days after the first anniversary of the effective date of this permit, and annually thereafter, which include:

- a. All data collected in accordance with Conditions VIII.B.5.a. and VIII.B.5.d. of this permit;
- b. All data collected in accordance with Condition VIII.B.7. of this permit;
- c. [RESERVED];
- d. [RESERVED]; and
- e. For the first annual report only, the tabulated results of all leachate analyses conducted prior to the effective date of this permit.

### VIII.C. INSPECTIONS

1. The Permittee shall inspect the components, structures, and equipment at the site in accordance with the inspection schedule as described in Sections F-2 and I-2a(1) of the permit application and as required by ADEM Admin. Code Rule 335-14-5-.07.
2. Monitoring and Inspection

The Permittee shall inspect the closed hazardous waste management units listed in Table VIII.1. at least weekly and after storms to detect any evidence of deterioration or improper operation as described in Sections F-2 and I-2a(1) of the permit application and as required under ADEM Admin. Code Rules 335-14-5-.07 and 335-14-5-.14. The inspections shall specifically include evaluation of the following items:

- a. Integrity of the final cover (erosion, ponding, subsidence, cracking, etc.);
- b. Growth and stabilization of vegetative cover;
- c. Run-on and run-off control system;
- d. Groundwater monitoring wells; and,
- e. Survey benchmarks.

### VIII.D. NOTICES AND CERTIFICATION

1. No later than 60 days after certification of closure of each hazardous waste disposal unit, the owner or operator must submit to the local zoning authority, or the authority with jurisdiction over local land use, and to the Department a record of the type, location, and quantity of hazardous wastes disposed of within each cell or other disposal unit of the facility. For hazardous wastes disposed of before January 12, 1981, the owner or operator must identify the type, location, and quantity of the hazardous wastes to the best of his knowledge and in accordance with any records he has kept.
2. Within 60 days of certification of closure of the first hazardous waste disposal unit and within 60 days of certification of closure of the last hazardous waste disposal unit, the owner or operator must:

- a. Record, in accordance with state law, a notation on the deed to the facility property or on some other instrument which is normally examined during title search that will in perpetuity notify any potential purchaser of the property that:
    - i. The land has been used to manage hazardous wastes;
    - ii. Its use is restricted under ADEM Admin. Code R. 335-14-5-.07; and
    - iii. The survey plat and record of the type, location, and quantity of hazardous wastes disposed of within each cell or other hazardous waste disposal unit of the facility required by ADEM Admin. Code R. 335-14-5-.07(7) and ADEM Admin. Code R. 335-14-5-.07(10)(a) have been filed with the local zoning authority or the authority with jurisdiction over local land use and with the Department; and
  - b. Submit a certification, signed by the owner or operator, that he has recorded the notation specified in Condition VIII.D.2.a. of this permit, including a copy of the document in which the notation has been placed, to the Department.
3. If the owner or operator or any subsequent owner or operator of the land upon which a hazardous waste disposal unit is located wishes to remove hazardous wastes and hazardous waste residues, the liner, if any, or contaminated soils, he must request a modification to the post-closure permit in accordance with the applicable requirements in Chapter 335-14-8. The owner or operator must demonstrate that the removal of hazardous wastes will satisfy the criteria of ADEM Admin. Code R. 335-14-5-.07(8)(c). By removing hazardous waste, the owner or operator may become a generator of hazardous waste and must manage it in accordance with all applicable requirements of Division 14. If he/she is granted a permit modification or otherwise granted approval to conduct such removal activities, the owner or operator may request that the Director approve either:
    - a. The removal of the notation on the deed to the facility property or other instrument normally examined during title search; or
    - b. The addition of a notation to the deed or instrument indicating the removal of the hazardous waste.
  4. No later than 60 days after completion of the established post-closure care period for each hazardous waste disposal unit, the owner or operator must submit to the Department, 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 an independent registered professional engineer. Documentation supporting the independent registered professional engineer's certification must be furnished to the Department upon request until the Department releases the owner or operator from the financial assurance requirements for post-closure care under ADEM Admin. Code R. 335-14-5-.08(6)(i).

**TABLE VIII.1.**  
**POST-CLOSURE CARE UNITS**

| UNIT NAME              | UNIT DESCRIPTION    | CLOSED-IN-PLACE<br>CAPACITY<br>(acre-feet [cubic yards <sup>1</sup> ]) | DESCRIPTION<br>OF UNIT <sup>2</sup>          | LOCATION<br>OF UNIT <sup>2</sup> |
|------------------------|---------------------|------------------------------------------------------------------------|----------------------------------------------|----------------------------------|
| Unit T-8               | Landfill Trench 8   | 150 [237,037]                                                          | Section L-1c                                 | 0100-020-004 <sup>3</sup>        |
| Unit T-9               | Landfill Trench 9   | 240 [379,259]                                                          | Section L-1c                                 | 0100-020-004 <sup>3</sup>        |
| Unit T-10              | Landfill Trench 10  | 270 [440,000]                                                          | Section L-1c                                 | 0100-020-004 <sup>3</sup>        |
| Unit T-11              | Landfill Trench 11  | 150 [237,037]                                                          | Section L-2a                                 | 0100-020-004 <sup>3</sup>        |
| Unit T-12              | Landfill Trench 12  | 340 [555,555]                                                          | Section L-2a                                 | 0100-020-004 <sup>3</sup>        |
| Unit T-12A             | Landfill Trench 12A | 70 [112,777]                                                           | Section L-2a                                 | 0100-020-004 <sup>3</sup>        |
| Unit T-13              | Landfill Trench 13  | 210 [336,111]                                                          | Section L-2a                                 | 0100-020-004 <sup>3</sup>        |
| Unit T-13A             | Landfill Trench 13A | 90 [151,851]                                                           | Section L-2a                                 | 0100-020-004 <sup>3</sup>        |
| Unit T-14              | Landfill Trench 14  | 180 [285,185]                                                          | Section L-2a                                 | 0100-020-004 <sup>3</sup>        |
| Unit T-15              | Landfill Trench 15  | 100 [157,988]                                                          | Section L-2a                                 | 0100-020-004 <sup>3</sup>        |
| Unit T-16              | Landfill Trench 16  | 520 [832,000]                                                          | Section L-2a                                 | 0100-020-004 <sup>3</sup>        |
| Unit T-17              | Landfill Trench 17  | 140 [231,481]                                                          | Section L-2b                                 | 0100-020-004 <sup>3</sup>        |
| Unit T-18              | Landfill Trench 18  | 770 [1,242,593]                                                        | Section L-2b                                 | 0100-020-004 <sup>3</sup>        |
| Unit T-19              | Landfill Trench 19  | 40 [59,000]                                                            | Section I, Appendix I-12<br>and Section L-2c | 0100-020-004 <sup>3</sup>        |
| Unit T-20              | Landfill Trench 20  | 840 [1,360,000]                                                        | Section I, Appendix I-13<br>and Section L-2d | 0100-020-004 <sup>3</sup>        |
| Unit T-21              | Landfill Trench 21  | 2,996 [4,883,446]                                                      | Section I, Appendix I-10<br>and Section L-2e | 0100-020-004 <sup>3</sup>        |
| Unit T-22 <sup>4</sup> | Landfill Trench 22  | --                                                                     | Section D-6 and Section<br>L-2f              | 0100-020-001                     |

<sup>1</sup> One acre-foot equals 1613.3 cubic yards.

<sup>2</sup> Location in application containing description (text), location (figure) of unit.

<sup>3</sup> Figure 0100-020-004 is located in Section L of the permit application.

<sup>4</sup> Post-closure care requirements for unit become applicable upon acceptance of certification of unit closure by the Department. Closed-in-place capacity to be added to this Table upon closure of unit.

**PART IX****GROUNDWATER MONITORING AND CORRECTIVE ACTION****IX.A. REQUIRED PROGRAM(S)**

1. Groundwater monitoring shall consist of the General Groundwater Monitoring Program of Condition IX.B. of this permit, the Selma Chalk Groundwater Monitoring Program (referenced as the Selma Chalk Surveillance System in the permit application) of Condition IX.F. of this permit, and the appropriate specific groundwater monitoring programs of Conditions IX.C., IX.D., and IX.E. of this permit, as applicable. [Note: The Selma Chalk Groundwater Monitoring System does not monitor an aquifer as defined in ADEM Admin. Code Rule 335-14-1-.02. Instead, it monitors the groundwater contained in the Selma Chalk.]
2. The Permittee shall commence groundwater monitoring as required by this permit not later than 120 calendar days after the effective date of this permit.

**IX.B. GENERAL GROUNDWATER MONITORING PROGRAM**

## 1. Well Location, Installation and Construction

The Permittee shall install and/or maintain a groundwater monitoring system to comply with the requirements of ADEM Admin. Code Rules 335-14-5-.06(8), 335-14-5-.06(9), 335-14-5-.06(10), and 335-14-5-.06(11) as applicable and as specified below:

- a. The Permittee shall maintain all groundwater monitoring wells at the facility as identified in Table IX.1. of this permit, at the locations specified on Figures E-1.2 of Appendix E-1, Section E of the permit application, and any other groundwater monitoring wells specified by Permit Condition IX.B.1.d. and IX.B.1.g. of this permit.
  - i. All groundwater monitoring wells shall be maintained in accordance with the plans and specifications presented in Appendix E-1, Figure E-1.2, Appendix E-5 (Eutaw wells), and Appendix E-9 (Selma Chalk wells) of Section E of the permit application and in accordance with ADEM Admin. Code Rule 335-14-5-.06.
  - ii. A groundwater monitoring well shall not be removed from any monitoring program specified in this permit without an approved permit modification pursuant to Permit Condition IX.G.
  - iii. If a groundwater monitoring well is damaged, the Permittee shall immediately notify the Department in writing, which includes a description of the well repair activities to be conducted. The well repair procedures must be approved by the Department prior to implementation. Within 30 calendar days after the well is repaired, the Permittee shall submit a written notification to the Department that the well repair activities were conducted in accordance with the approved procedures.

- iv. If a groundwater monitoring well is deleted from the monitoring program(s) required by this permit in accordance with Permit Conditions IX.B.1.a.ii. and IX.G. it shall be abandoned within 90 calendar days after deletion using procedures to be approved by the Department. Within 30 calendar days after the well is abandoned, the Permittee shall submit a written notification to the Department that the well abandonment activities were conducted in accordance with the approved procedures.
- b. Groundwater monitoring wells RCRA6, RCRA7, RCRA9, and RCRA10A shall define the point of compliance for the entire facility, including all operating and closed units.
- c. The Permittee shall maintain groundwater monitoring well(s) RCRA8 (Eutaw system), and SMBG02 (Selma Chalk system) as the background monitoring well(s) for the entire facility as specified in Section E-4a of the permit application. [Note: Well SMBG01 (Selma Chalk system) data collected prior to the initial placement of waste in Trench 22 (on or about April 18, 1996) may also be considered as background data for statistical purposes.]
- d. The Permittee shall install and maintain additional groundwater monitoring wells as necessary to assess changes in the rate and extent of any plume of contamination or as otherwise deemed necessary to maintain compliance with ADEM Admin. Code Rules 335-14-5-.06(6), 335-14-5-.06(8), 335-14-5-.06(9), 335-14-5-.06(10), and 335-14-5-.06(11), as applicable.
- i. A plan in the form of a permit modification request specifying the design, location and installation of any additional monitoring wells should be submitted to the Department at least 90 calendar days prior to installation (except as specified in Condition IX.B.1.g.i. of this permit) which, at a minimum shall include:
  - (I) Well construction techniques including casing depths and proposed total depth of well(s);
  - (II) Well development method(s);
  - (III) A complete description of well construction materials;
  - (IV) A schedule of implementation for construction;
  - (V) Provisions for determining the lithologic characteristics, hydraulic conductivity, grain size distribution, and porosity for the applicable aquifer unit(s) at the location of the new well(s); and,
  - (VI) Provisions for complying with the fracture mapping requirements of Condition IX.B.1.i. of this permit.
- ii. Within 30 calendar days after the installation of the well is completed (except as specified in Permit Condition and IX.B.1.g.ii.), the Permittee

shall submit a report to the Department which includes, for each well installed:

- (I) Surveyed location and elevation;
  - (II) Surveyed elevation reference point;
  - (III) Total depth;
  - (IV) Screened interval;
  - (V) Well log; and
  - (VI) Other pertinent information.
- iii. All location and elevation data shall be surveyed by a professional surveyor licensed in the State of Alabama. Elevation data shall be recorded and reported as mean sea level (MSL) and referenced to an appropriate National Geodetic Vertical Datum (NGVD) benchmark. Location data shall include latitude and longitude.
- e. [RESERVED]
- f. [RESERVED]
- g. The Permittee shall install additional Selma Chalk monitoring wells adjacent to each new landfill cell (Landfill Trench 22) prior to commencement of disposal operations within that landfill cell. Upon installation, these wells shall be added to the Selma Chalk Monitoring Program as described in Permit Condition IX.F. and Table IX.1. The well construction and location will follow the specifications shown in Figure E-1-2, Appendix E-1, and Section E-5a of the permit application.
- i. At least 30 calendar days prior to the installation of these wells, the Permittee shall submit the information required in Permit Condition IX.B.1.d.i. for each well to be installed.
  - ii. After the installation of the well is completed, and at least 45 calendar days prior to the commencement of disposal operations within that cell, the Permittee shall submit a written report to the Department which includes, for each well installed, the information required in Permit Conditions IX.B.1.d.ii. and IX.B.1.d.iii.
- h. The Permittee shall review and submit revisions to well schematics on an on-going basis as necessary to reflect site changes (e.g., changes in ground surface elevations, total depth, etc. due to construction and or sampling activities).
- i. An updated map will be submitted to the Department annually as part of the annual groundwater report required by Permit Condition IX.B.6.b. Future

fracture mapping (after the effective date of this permit) will be conducted in accordance with the methods described in Section E-5a of the permit application.

2. General Groundwater Monitoring Requirements

- a. The Permittee shall determine the groundwater surface elevation from all monitoring wells at least quarterly and each time a sampling event is conducted. The results of these determinations should be submitted in accordance with Permit Condition IX.B.6. Elevation data should be recorded and reported as mean sea level (MSL) and referenced to an appropriate NGVD benchmark.
- b. The Permittee shall determine the groundwater flow rate and direction in the underlying aquifer(s) at least annually and submit the results in accordance with Permit Condition IX.B.6. of this permit.
- c. The Permittee shall determine background concentrations of hazardous constituents and other chemical parameters required to be monitored by this permit in accordance with Section E-4d of the permit application and ADEM Admin. Code Rule 335-14-5-.06(8)(g).

3. Groundwater Protection Standard

- a. The groundwater protection standard, as required under ADEM Admin. Code Rule 335-14-5-.06(3), shall consist of Table IX.4. of this permit which lists the hazardous constituents and their respective concentration limits.
- b. The groundwater protection standard applies to all hazardous waste or hazardous constituent releases as deemed appropriate by the Department to protect human health and the environment.

4. Compliance Period

- a. The compliance period during which the groundwater protection standard specified in Permit Condition IX.B.3. applies shall begin at the time of the first sampling event of the compliance monitoring program (Permit Condition IX.D.), or the corrective action monitoring program (Permit Condition IX.E.), whichever is earlier.
- b. The compliance period shall continue (after beginning pursuant to Permit Condition IX.B.4.a.) until the groundwater protection standard as defined by Permit Condition IX.B.3.a. has not been exceeded for a period of three consecutive years.
- c. If the Permittee is engaged in a corrective action program pursuant to Permit Condition IX.E., then the compliance period shall continue as required by ADEM Admin. Code Rule 335-14-5-.06(7)(c) until the groundwater protection standard has not been exceeded for a period of three consecutive years after corrective action has been terminated and this permit has been modified, in accordance with Permit Condition IX.G., to implement a compliance monitoring program pursuant to Permit Condition IX.D. or a detection monitoring program pursuant

to Permit Condition IX.C., as required by ADEM Admin. Code Rule 335-14-5-.06(11)(f).

## 5. Sampling and Analysis Procedures

The Permittee shall use the following techniques and procedures when obtaining and analyzing samples from the groundwater monitoring wells described in Permit Condition IX.B.1. to provide a reliable indication of the quality of the groundwater as required under ADEM Admin. Code Rules 335-14-5-.06(8)(d), (e), and (g):

- a. Samples shall be collected, preserved, and shipped (when shipped off-site for analysis) in accordance with the procedures specified in Section E-4b and Section E-5b Appendix E-13 of Section E of the permit application.
- b. Samples shall be analyzed according to the procedures specified in Section E-4c, Appendix E-2, Table E-2.22 (Eutaw system) and Section E-5c, Appendix E-2, Table E-2.23 (Selma Chalk system) of Section E of the permit application, or the most recent edition of SW-846 or other appropriate methods approved by the Department. Analytical method detection limits shall be less than or equal to the concentration limits specified in Table IX.2 or IX.3 of this permit unless otherwise approved by the Department.
- c. Samples shall be tracked and controlled using the chain-of-custody procedures specified in Sections E-4b and E-5b and Appendix E-13 of Section E of the permit application.
- d. Statistical analyses used to evaluate groundwater monitoring data shall be as described in Section E-4d, Table E-2.22, and Appendix E-15 of Section E of the permit application and ADEM Admin. Code Rule 335-14-5-.06(8)(h).
- e. All samples taken in accordance with this permit shall not be filtered prior to analysis.
- f. Well purging and sample collection shall be conducted in accordance with the procedures described in Section E-4b and Appendix E-13 of Section E of the permit application for the Eutaw Formation monitoring wells, and in accordance with the procedures described in Section E-5b and Appendix E-13 of Section E of the permit application for the Selma Chalk monitoring wells.

## 6. Recordkeeping and Reporting

- a. The Permittee shall keep and maintain all monitoring, testing, and analytical data obtained in accordance with Permit Conditions IX.B., IX.C., IX.D., and IX.E as required by Permit Condition I.C.10.
- b. The Permittee shall submit to the Department a written report to include all analytical sampling data, established background values, statistical evaluations, groundwater elevations, associated potentiometric maps, and the annual groundwater flow rate and direction determinations. The analytical method and the method detection limit (MDL) for each constituent must be integrated into all reports of analysis. The report shall be submitted within 60 calendar days after

the first sampling event and on an annual basis thereafter. Copies of this report shall be kept at the facility in accordance with Permit Conditions I.C.10.c. and I.C.10.e.

- c. The Permittee shall submit progress reports to the Department describing implementation of groundwater monitoring and/or corrective action activities at the site as required by Part IX of this permit on a quarterly basis. The first progress report shall be submitted to the Department within 90 calendar days after the effective date of this permit. The progress reports shall continue until such time as the required monitoring and/or corrective action systems and activities required by this permit are fully constructed and operational. In the event that additional monitoring and/or corrective action requirements are imposed through a permit modification, the quarterly reporting requirement shall resume, commencing upon the effective date of the permit modification and continuing until the required monitoring and/or corrective action systems and activities are again fully constructed and operational.

#### **IX.C. DETECTION MONITORING PROGRAM**

The requirements of this Condition are applicable to the Eutaw Formation monitoring well system. Except as specified otherwise in this permit, the Detection Monitoring Program shall be implemented in accordance with Section E-4 of the permit application and ADEM Admin. Code Rule 335-14-5-.06(9).

##### **1. Monitoring Requirements**

In addition to the general groundwater monitoring requirements specified in Permit Condition IX.B.2., the Permittee shall:

- a. Sample all point of compliance wells and background wells and analyze for the constituents listed in Table IX.2. of this permit on a semi-annual basis in accordance with Permit Condition IX.B.5.
- b. Sample all background and point of compliance monitoring wells and analyze for temperature (degrees F or C), specific conductance (Mhos/cm), and pH (standard units) each time the well is sampled in accordance with Permit Condition IX.B.5. The data obtained should be submitted as raw data in the reports required by Permit Condition IX.B.6.
- c. Sample all designated background monitoring wells and analyze, in accordance with Permit Condition IX.B.5., for the constituents listed in Table IX.2. of this permit in all monitoring events.

##### **2. Reporting and Response Requirements**

In addition to the recordkeeping and reporting requirements specified in Permit Condition IX.B.6.:

- a. The Permittee shall determine whether there is statistically significant evidence of contamination above background levels at each monitoring well within 45 calendar days after completion of each sampling event. The statistical evaluation

of monitoring well analytical data shall be performed pursuant to Permit Condition IX.B.5. and ADEM Admin. Code Rule 335-14-5-.06(9)(f).

- b. If the Permittee determines, pursuant to Permit Condition IX.C.2.a., that any constituent listed in Table IX.2. of this permit exceeds its respective method detection limit (MDL), he or she shall implement the groundwater quality assessment plan as described in Section E-4e(1) of the permit application. Specifically, the Permittee shall:
  - i. Determine if the results are in error, as described in Section E-4e(1)1. of the permit application. If an error is found, the Permittee shall notify the Department of this finding in writing, together with the investigation report, within 7 calendar days, as described in Section E-4e(1)1. of the permit application.
  - ii. If the result cannot be conclusively demonstrated to be an error, determine if there is any non-waste basis for the exceedance of the limit, as described in Section E-4e(1)2. of the permit application. If a non-waste basis is found, the Permittee shall notify the Department of this finding in writing, together with the investigation report, within 7 calendar days, as described in Section E-4e(1)2. of the permit application.
  - iii. If the result is not resolved conclusively pursuant to Conditions IX.C.2.b.i. or IX.C.2.b.ii. of this permit, the Permittee shall resample in accordance with the procedures described in Section E-4e(1)3. of the permit application. The Permittee shall notify the Department of the results of the resampling in writing within 7 calendar days of receipt of the results, as described in Section E-4e(1)3. of the permit application.
  - iv. If a constituent which has been confirmed to exceed its MDL in accordance with Conditions IX.C.2.b.i., IX.C.2.b.ii., and IX.C.2.b.iii. for two consecutive semi-annual sampling events, the Permittee shall resample the affected well(s) and analyze for all constituents identified in ADEM Admin. Code Rule 335-14-5-Appendix IX, and assess the results of the resampling in accordance with the procedures described in Section E-4e(1)4. of the permit application.
  - v. If any constituent analyzed for pursuant to Condition IX.C.2.b.iv. of this permit is confirmed to exceed its respective MDL, that constituent will be added to the semi-annual monitoring list in Table IX.2. of this permit as a permit modification pursuant to Condition IX.G. of this permit. If any constituent which was added to the original Table IX.2. of this permit pursuant to this Condition and Condition IX.C.2.b.iv. of this permit is not present at a level above its respective MDL for a period of three consecutive years, then this permit may be modified pursuant to Condition IX.G. to remove that constituent from the Table IX.2. list.
- c. If the Permittee determines, pursuant to Condition IX.C.2.a. of this permit, that any constituent listed in Table IX.2. of this permit exceeds its respective Practical

Quantitation Limit (PQL) as listed in Table IX.2. of this permit, he or she shall implement the groundwater quality assessment plan as described in Section E-4e(2) of the permit application. Specifically, the Permittee shall:

- i. Determine if the results are in error, as described in Section E-4e(2)1. of the permit application. If an error is found, the Permittee shall notify the Department of this finding in writing, together with the investigation report, within 7 calendar days, as described in Section E-4e(2)1. of the permit application.
- ii. If the result cannot be conclusively demonstrated to be an error, determine if there is any non-waste basis for the exceedance of the PQL, as described in Section E-4e(2)2. of the permit application. If a non-waste basis is found, the Permittee shall notify the Department of this finding in writing, together with the investigation report, within 7 calendar days, as described in Section E-4e(2)2. of the permit application.
- iii. If the result is not resolved conclusively pursuant to Conditions IX.C.2.c.i. or IX.C.2.c.ii. of this permit, the Permittee shall resample in accordance with the procedures described in Section E-4e(2)3. of the permit application. The Permittee shall notify the Department of the results of the resampling in writing within 7 calendar days of receipt of the results, as described in Section E-4e(2)3. of the permit application.
- iv. Within 30 calendar days following mailing of the written confirmation required by Condition IX.C.2.c.iii. of this permit, the Permittee shall, as described in Section E-4e(2)4. of the permit application, submit to the Department a plan and schedule to identify:
  - (I) Which hazardous constituents (from ADEM Admin. Code Rule 335-14-5-Appendix IX), if any, are in the Eutaw aquifer;
  - (II) The rate of migration of these constituents; and
  - (III) The extent of any plume of contamination.
- v. The migration study required by Condition IX.C.2.c.iv. of this permit shall commence upon approval of the plan and schedule by the Department.
- vi. (I) Within 30 calendar days of completing the contaminant migration study required by Conditions IX.C.2.c.iv. and IX.C.2.c.v. of this permit, the Permittee shall submit to the Department a written report of its findings, and if necessary, an application for a permit modification pursuant to Condition IX.G. of this permit to establish a compliance monitoring program pursuant to ADEM Admin. Code Rule 335-14-5-.06(10) and Condition IX.D. of this permit.

- (II) A permit modification pursuant to Condition IX.C.2.c.vi.(I) of this permit is not required if the Permittee determines, and the Department concurs, that the presence of hazardous constituents in groundwater is not due to a release from a regulated unit or a SWMU.
- vii. Subsequent to the implementation of the migration study required pursuant to Conditions IX.C.2.c.iv. and IX.C.2.c.v. of this permit, the Permittee shall continue to comply with all routine monitoring and data evaluation requirements of Part IX and Condition IX.C. of this permit.
- viii. Once the presence of hazardous constituents in a given well has been confirmed by a re-test, and the Permittee has identified the affected well(s) in its notification to the Department pursuant to Condition IX.C.2.c.iii., the Permittee need not repeat the re-test and notification steps for previously reported wells following each subsequent, scheduled sampling event. However, all sampling results shall be included in the reports required by Condition IX.B.6. of this permit.
- ix. If a constituent is confirmed to exceed its Maximum Contaminant Level (MCL)/Alternate Concentration Level (ACL) limit, the Permittee shall submit an application for a permit modification to the Department within 90 calendar days of the determination pursuant to Condition IX.G. of this permit to establish a corrective action program pursuant to ADEM Admin. Code Rule 335-14-5-.06(10)(h) and Condition IX.E. of this permit.
- d. If the Permittee determines that the detection monitoring program no longer satisfies the requirements of Condition IX.C. of this permit or ADEM Admin. Code Rule 335-14-5-.06(9), the Permittee must, within 90 calendar days, submit an application for a permit modification to make any appropriate changes to the program.

**IX.D. COMPLIANCE MONITORING PROGRAM [RESERVED]**

**IX.E. CORRECTIVE ACTION MONITORING PROGRAM [RESERVED]**

**IX.F. SELMA CHALK MONITORING PROGRAM**

The requirements of this Condition are applicable to the Selma Chalk monitoring well system. Except as specified otherwise in this permit, the Selma Chalk Monitoring Program shall be implemented in accordance with Section E-5 of the permit application and ADEM Admin. Code Rule 335-14-5-.06(8). [Note: The Selma Chalk monitoring well system is referenced as the Selma Chalk surveillance well system in the permit application.]

**1. Monitoring Requirements**

In addition to the general groundwater monitoring requirements specified in Permit Condition IX.B.2., the Permittee shall:

- a. Sample all Selma Chalk monitoring wells and analyze for the constituents listed in Table IX.5. of this permit on a semi-annual basis in accordance with Condition IX.B.5. of this permit. This schedule shall begin within 180 days after the effective date of this permit.
  - b. Sample all Selma Chalk background and monitoring wells and analyze for the field parameters listed in Table IX.3. of this permit each time the well is sampled in accordance with Permit Condition IX.B.5. This schedule shall begin within 180 calendar days after the effective date of this permit. The field data obtained should be submitted as raw data in the reports required by Permit Condition IX.B.6.
  - c. Sample all designated background monitoring wells and analyze, in accordance with Permit Condition IX.B.5., for the constituents listed in Table IX.5. of this permit in all monitoring events.
2. Reporting and Response Requirements

In addition to the recordkeeping and reporting requirements specified in Permit Condition IX.B.6.:

- a. The Permittee shall compare the sample results for the Selma Chalk monitoring wells against the following criteria, as described in Section E-5d of the permit application.
  - i. If the results are greater than the respective MCL/ACL for the constituent, the Permittee shall initiate the procedures listed in Condition IX.F.2.b. of this permit, as described in Section E-5e(1) of the permit application.
  - ii. If the results are greater than the MCL/ACL for that constituent, the Permittee shall initiate the procedures listed in Condition IX.F.2.c. of this permit, as described in Section E-5e(1) and E-5e(2) of the permit application.
  - iii. The Permittee shall initiate the procedures listed in Permit Condition IX.F.2.d. if the results of the resample required by Permit Conditions IX.F.2.b.iii. or IX.F.2.c.iii. are greater than the MCL/ACL and at least one of the following criteria are met.
    - (I) Three or more volatile organic compounds (VOC) are present in concentrations greater than 20 µg/l for each compound; or
    - (II) Two or more VOCs are present in concentrations greater than 30 µg/l for each compound; or
    - (III) One or more VOC is present in concentrations greater than 50 µg/l for each compound; or

- (IV) One or more metals is present in dissolved form in concentrations greater than the respective MCL/ACL for that metal.
- b. If the Permittee determines, pursuant to Permit Condition IX.F.2.a., that any constituent listed in Table IX.5. of this permit exceeds its respective MDL, he or she shall implement the groundwater quality assessment plan as described in Section E-5e(1) of the permit application. Specifically, the Permittee shall:
  - i. Determine if the results are in error, as described in Section E-5e(1)1. of the permit application. If an error is found, the Permittee shall notify the Department of this finding in writing, together with the investigation report, within 7 calendar days, as described in Section E-5e(1)1. of the permit application.
  - ii. If the result cannot be conclusively demonstrated to be an error, determine if there is any non-waste basis for the exceedance of the limit, as described in Section E-5e(1)2. of the permit application. If a non-waste basis is found, the Permittee shall notify the Department of this finding in writing, together with the investigation report, within 7 calendar days, as described in Section E-5e(1)2. of the permit application.
  - iii. If the result is not resolved conclusively pursuant to Permit Conditions IX.F.2.b.i. or IX.F.2.b.ii., the Permittee shall resample in accordance with the procedures described in Section E-5e(1)3. of the permit application. The Permittee shall notify the Department of the results of the resampling in writing within 7 calendar days of receipt of the results, as described in Section E-5e(1)3. of the permit application.
  - iv. If a constituent is confirmed to exceed its MDL in accordance with Permit Conditions IX.F.2.b.i., IX.F.2.b.ii., and IX.F.2.b.iii. the Permittee shall report the exceedance to the Department within 7 calendar days of the confirmation, and continue monitoring for the constituents listed in Table IX.5., as described in Section E-5e(1)4. of the permit application.
- c. If the Permittee determines, pursuant to Condition IX.F.2.a. of this permit, that any constituent listed in Table IX.5. of this permit exceeds its respective MCL/ACL, he or she shall implement the groundwater quality assessment plan as described in Section E-5e(2) of the permit application. Specifically, the Permittee shall:
  - i. Determine if the results are in error, as described in Section E-5e(2)1. of the permit application. If an error is found, the Permittee shall notify the Department of this finding in writing, together with the investigation report, within seven days, as described in Section E-5e(2)1. of the permit application.
  - ii. If the result cannot be conclusively demonstrated to be an error, determine if there is any non-waste basis for the exceedance of the

limit, as described in Section E-5e(2)2. of the permit application. If a non-waste basis is found, the Permittee shall notify the Department of this finding in writing, together with the investigation report, within 7 calendar days, as described in Section E-5e(2)2. of the permit application.

- iii. If the result is not resolved conclusively pursuant to Permit Conditions IX.F.2.c.i. or IX.F.2.c.ii., the Permittee shall resample in accordance with the procedures described in Section E-5e(2)3. of the permit application. The Permittee shall notify the Department of the results of the resampling in writing within 7 calendar days of receipt of the results, as described in Section E-5e(2)3. of the permit application.
- iv. If any constituent(s) is confirmed to exceed its MCL/ACL, the Permittee shall report the exceedance to the Department within 7 calendar days of the confirmation, and shall resample the affected well(s) and analyze for all of the constituents identified in ADEM Admin. Code Rule 335-14-5-Appendix IX, as described in Section E-5e(2)4. of the permit application.
- v. If any ADEM Admin. Code Rule 335-14-5-Appendix IX constituent(s) is confirmed to be present at a level above its PQL (or above its MCL/ACL if the PQL is greater than the MCL/ACL) pursuant to Permit Conditions IX.F.2.c.i., IX.F.2.c.ii., IX.F.2.c.iii., and IX.F.2.c.iv., the Permittee shall add the constituent(s) to the Selma Chalk monitoring program, as described in Section E-5e(2)5. of the permit application, and shall submit a permit modification application pursuant to Permit Condition IX.G. to add the constituent(s) to Table IX.5. of this permit.
- vi. If any constituent which was added to the Selma Chalk monitoring program and Table IX.5. of this permit pursuant to Permit Condition IX.F.2.c.v. is not present at a level above its respective PQL (or above its MCL/ACL if the PQL is greater than the MCL/ACL) for a period of three consecutive years, this permit may be modified pursuant to Condition IX.G. to remove that constituent from Selma Chalk monitoring program and the Table IX.5. list.
- d. If the Permittee determines, pursuant to Permit Condition IX.F.2.a., that any constituent(s) exceeds any of the threshold levels identified in Permit Condition IX.F.2.a.iii., he or she shall implement the procedures as described in Section E-5e(2) of the permit application. Specifically, the Permittee shall:
  - i. If the exceedance of the criteria is confirmed in the resample required by Permit Conditions IX.F.2.b.iii. or IX.F.2.c.iii., the Permittee shall notify the Department of this finding in writing, together with the investigation report, within 7 calendar days, as described in Section E-5e(2)1. of the permit application.
  - ii. Within 30 calendar days following mailing of the written confirmation required by Permit Condition IX.F.2.d.i., the Permittee shall, as

described in Section E-5e(2)1. of the permit application, submit to the Department a plan and schedule to identify:

- (I) Which hazardous constituents (from ADEM Admin. Code Rule 335-14-5-Appendix IX), if any, are in the Selma Chalk groundwater;
  - (II) The rate of migration of these constituents; and
  - (III) The extent of any plume of contamination.
- iii. The assessment study required by Permit Condition IX.F.2.d.ii. shall commence upon approval of the plan and schedule by the Department.
  - iv. Within 60 calendar days after completing the contaminant migration study required by Permit Conditions IX.F.2.d.ii. and IX.F.2.d.iii., the Permittee shall submit to the Department a written report of its findings, and an application for a permit modification pursuant to Permit Condition IX.G. The report shall include an engineering report with recommendations on mitigation of continued migration of contaminants, together with a proposed implementation schedule for the proposed mitigation measures, and shall identify any ADEM Admin. Code Rule 335-14-5-Appendix IX constituents which are to be added to the Selma Chalk monitoring program and Table IX.5. of this permit, as described in Section E-5e(2)2. of the permit application.
  - v. The Permittee shall commence implementation of the mitigation of continued migration measures required by Permit Condition IX.F.2.d.ii. upon approval of the plan and schedule by the Department.
  - vi. The Permittee shall continue the semi-annual sampling of the Selma Chalk monitoring system. As described in Section E-5e(2)3. of the permit application, the sampling of the Selma Chalk monitoring wells for ADEM Admin. Code Rule 335-14-5-Appendix IX constituents shall be repeated every five years, except as provided in Permit Condition IX.F.2.d.ix., commencing from the initial sampling for those constituents pursuant to Permit Condition IX.F.2.d.i.. Subsequent sampling for the Appendix IX constituents may be conducted during a regularly scheduled sampling event, prior to the five year limit from the previous Appendix IX constituent sampling.
  - vii. If any additional ADEM Admin. Code Rule 335-14-5-Appendix IX constituent(s) is confirmed to be present at a level above its PQL (or above its MCL/ACL if the PQL is greater than the MCL/ACL) pursuant to Permit Conditions IX.F.2.d.ii., IX.F.2.c.iii., and IX.F.2.c.vi., then the Permittee shall add the constituent(s) to the Selma Chalk monitoring program, as described in Section E-5e(2)3. of the permit application, and shall submit a permit modification application pursuant to Permit Condition IX.G. of this permit to add the constituent(s) to Table IX.5. of this permit.

- viii. If any constituent which was added to the Selma Chalk monitoring program and Table IX.5. of this permit pursuant to Permit Condition IX.F.2.d.vii. is not present at a level above its respective PQL (or above its MCL/ACL if the PQL is greater than the MCL/ACL) for a period of three consecutive years, then this permit may be modified pursuant to Permit Condition IX.G. to remove that constituent from the Selma Chalk monitoring program and the Table IX.5. list.
  - ix. If none of the criteria specified in Permit Condition IX.F.2.a.iii. are exceeded for three consecutive years, as described in Section E-5e(2)4. of the permit application, the Appendix IX sampling frequency of once every five years, as required by Permit Condition IX.F.2.d.vi. will cease, unless restarted by a subsequent exceedance.
  - x. Subsequent to the implementation of the assessment study required pursuant to Permit Conditions IX.F.2.d.ii. and IX.F.2.d.iii., the Permittee shall continue to comply with all routine monitoring and data evaluation, recordkeeping and reporting requirements of Part IX and Permit Condition IX.F.
  - xi. Once the presence of hazardous constituents in a given well has been confirmed by a re-test, and the Permittee has identified the affected well(s) in its notification to the Department pursuant to Permit Condition IX.C.2.d.i., the Permittee need not repeat the re-test and notification steps for previously reported wells following each subsequent scheduled sampling event. However, all sampling results shall be included in the reports required by Permit Condition IX.B.6.
- e. If the Permittee determines that the Selma Chalk monitoring program no longer satisfies the requirements of Permit Condition IX.F. or ADEM Admin. Code Rule 335-14-5-.06(8), he or she must, within 90 calendar days, submit an application for a permit modification to make any appropriate changes to the program.

**TABLE IX.1**  
**MONITORING WELL DESIGNATIONS<sup>1</sup>**

| WELL<br>NUMBER | WELL<br>TYPE <sup>2</sup>   | WELL<br>LATITUDE<br>(State Plane<br>Coordinates,<br>Easting) | WELL<br>LONGITUDE<br>(State Plane<br>Coordinates,<br>Northing) | UNIT(S)<br>MONITORED <sup>3</sup> | WELL<br>DEPTH<br>(ft) | GROUND<br>ELEVATION<br>(ft. MSL) | TOP-OF-<br>CASING<br>ELEVATION<br>(ft. MSL) | SCREENED<br>INTERVAL<br>(ft. MSL) | MONITORED<br>ZONE | SAMPLING<br>FREQUENCY <sup>4</sup> |
|----------------|-----------------------------|--------------------------------------------------------------|----------------------------------------------------------------|-----------------------------------|-----------------------|----------------------------------|---------------------------------------------|-----------------------------------|-------------------|------------------------------------|
| SMBG01         | CSM,<br>(BKG <sup>6</sup> ) | 11030.32                                                     | 7976.1                                                         | Entire Site                       | 100.70                | 293.4                            | 297.12                                      | 206.14 - 196.24                   | Selma Chalk       | Semi-annually                      |
| SMBG02         | BKG                         | 6475.8                                                       | 6551.1                                                         | Entire Site                       | 100.60                | 260.22                           | 263.22                                      | 172.52 - 162.62                   | Selma Chalk       | Semi-annually                      |
| SM01           | CSM                         | 14575.15                                                     | 7043.23                                                        | T-19                              | 56.29                 | 174.26                           | 179.33                                      | 128.01 - 123.16                   | Selma Chalk       | Semi-annually                      |
| SM01A          | CSM                         | 14601.06                                                     | 7045.05                                                        | T-19                              | 74.71                 | 174.17                           | 179.75                                      | 115.02 - 105.17                   | Selma Chalk       | Semi-annually                      |
| SM02           | CSM                         | 13808.05                                                     | 7773.32                                                        | T-18                              | 153.46                | 198.7                            | 268.84                                      | 58.60 - 48.75                     | Selma Chalk       | Semi-annually                      |
| SM03           | CSM                         | 13406.69                                                     | 7771.48                                                        | T-18                              | 88.81                 | 205.8                            | 207.53                                      | 128.76 - 118.91                   | Selma Chalk       | Semi-annually                      |
| SM04           | CSM                         | 13153.53                                                     | 7262.67                                                        | T-17                              | 119.50                | 230.9                            | 238.92                                      | 129.85 - 120.0                    | Selma Chalk       | Semi-annually                      |
| SM05           | CSM                         | 12663.26                                                     | 6978.19                                                        | T-9, T-10                         | 61.84                 | 253.2                            | 255.14                                      | 198.11 - 193.26                   | Selma Chalk       | Bi-monthly                         |
| SM05A          | CSM                         | 12645.81                                                     | 6975.44                                                        | T-9, T-10                         | 107.21                | 253.6                            | 255.85                                      | 158.43 - 148.58                   | Selma Chalk       | Bi-monthly                         |
| SM06           | CSM                         | 12192.43                                                     | 7018.19                                                        | T-10                              | 100.10                | 272.5                            | 275.89                                      | 180.65 - 175.80                   | Selma Chalk       | Semi-annually                      |
| SM06A          | CSM                         | 12182.83                                                     | 7008.59                                                        | T-10                              | 141.43                | 273.1                            | 276.21                                      | 144.64 - 134.79                   | Selma Chalk       | Semi-annually                      |
| SM07           | CSM                         | 11759.02                                                     | 7023.96                                                        | T-11                              | 108.16                | 274.4                            | 278.05                                      | 174.82 - 169.94                   | Selma Chalk       | Semi-annually                      |
| SM07A          | CSM                         | 11746.54                                                     | 7024.22                                                        | T-11                              | 123.30                | 274.5                            | 277.06                                      | 163.61 - 153.76                   | Selma Chalk       | Semi-annually                      |
| SM08           | CSM                         | 10772.61                                                     | 7015.2                                                         | T-20                              | 132.90                | 263.4                            | 265.53                                      | 142.49 - 132.64                   | Selma Chalk       | Semi-annually                      |
| SM08A          | CSM                         | 10786.37                                                     | 7015.77                                                        | T-20                              | 186.31                | 263.4                            | 265.97                                      | 89.54 - 79.69                     | Selma Chalk       | Semi-annually                      |
| SM09           | CSM                         | 10533.7                                                      | 6748.51                                                        | T-20                              | 155.40                | 247.4                            | 252.1                                       | 101.55 - 96.70                    | Selma Chalk       | Semi-annually                      |
| SM09A          | CSM                         | 10533.45                                                     | 6764.36                                                        | T-20                              | 170.70                | 247.9                            | 252.68                                      | 91.81 - 81.96                     | Selma Chalk       | Semi-annually                      |
| SM10           | CSM                         | 10762.21                                                     | 5476.44                                                        | T-21A                             | 88.96                 | 191.26                           | 228.07                                      | 144.71 - 139.8                    | Selma Chalk       | Semi-annually                      |
| SM10A          | CSM                         | 10746.23                                                     | 5476.2                                                         | T-21A                             | 146.86                | 191.27                           | 228.67                                      | 92.4 - 82.5                       | Selma Chalk       | Semi-annually                      |
| SM11           | CSM                         | 11434.22                                                     | 5463.58                                                        | T-16                              | 103.45                | 197.66                           | 200.83                                      | 107.56 - 97.7                     | Selma Chalk       | Semi-annually                      |
| SM12           | CSM                         | 12156.54                                                     | 5261.04                                                        | T-15                              | 66.14                 | 191.88                           | 195.68                                      | 134.78 - 129.88                   | Selma Chalk       | Semi-annually                      |
| SM12A          | CSM                         | 12170.82                                                     | 5258.13                                                        | T-15                              | 133.08                | 191.46                           | 195.56                                      | 75.36 - 65.46                     | Selma Chalk       | Semi-annually                      |
| SM13           | CSM                         | 12444.4                                                      | 5462.61                                                        | T-15                              | 145.39                | 209.5                            | 212.69                                      | 77.42 - 67.57                     | Selma Chalk       | Semi-annually                      |
| SM14           | CSM                         | 12512.25                                                     | 5683.45                                                        | T-15                              | 72.96                 | 222.1                            | 223.32                                      | 155.6 - 150.6                     | Selma Chalk       | Semi-annually                      |
| SM14A          | CSM                         | 12515.93                                                     | 5692.07                                                        | T-15                              | 83.60                 | 221.5                            | 222.61                                      | 149.14 - 139.3                    | Selma Chalk       | Semi-annually                      |
| SM15           | CSM                         | 12664.01                                                     | 5935.02                                                        | T-13                              | 93.50                 | 223.8                            | 226.39                                      | 142.88 - 133.08                   | Selma Chalk       | Semi-annually                      |
| SM16           | CSM                         | 12688.02                                                     | 6335.4                                                         | T-8                               | 90.20                 | 250.5                            | 251.91                                      | 167.0 - 162.2                     | Selma Chalk       | Semi-annually                      |
| SM16A          | CSM                         | 12702.56                                                     | 6337.77                                                        | T-8                               | 101.50                | 249.7                            | 251.09                                      | 159.6 - 149.8                     | Selma Chalk       | Semi-annually                      |
| SM17           | CSM                         | 14460.62                                                     | 6290.44                                                        | T-4, T-5, T-6, T-7                | 34.00                 | 176.6                            | 179.62                                      | 179.04 - 169.04                   | Selma Chalk       | Semi-annually                      |

TABLE IX.1 (continued)

| WELL NUMBER | WELL TYPE <sup>2</sup> | WELL LATITUDE<br>(State Plane Coordinates, Easting) | WELL LONGITUDE<br>(State Plane Coordinates, Northing) | UNIT(S) MONITORED <sup>3</sup> | WELL DEPTH (ft) | GROUND ELEVATION (ft. MSL) | TOP-OF-CASING ELEVATION (ft. MSL) | SCREENED INTERVAL (ft. MSL)               | MONITORED ZONE | SAMPLING FREQUENCY <sup>4</sup> |
|-------------|------------------------|-----------------------------------------------------|-------------------------------------------------------|--------------------------------|-----------------|----------------------------|-----------------------------------|-------------------------------------------|----------------|---------------------------------|
| SM18        | CSM                    | 14205.56                                            | 5777.16                                               | T-4, T-5, T-6, T-7             | 41.50           | 201.04                     | 204.56                            | 172.04 - 162.04                           | Selma Chalk    | Semi-annually                   |
| SM19        | CSM                    | 13754.82                                            | 5704.98                                               | T-4, T-5, T-6, T-7             | 78.50           | 198.92                     | 202.44                            | 133.92 - 123.92                           | Selma Chalk    | Semi-annually                   |
| SM20        | CSM                    | 14533.04                                            | 5934.21                                               | T-4, T-5, T-6, T-7             | 68.50           | 176.13                     | 179.65                            | 121.13 - 111.13                           | Selma Chalk    | Semi-annually                   |
| SM21        | CSM                    | 14008.17                                            | 5780.48                                               | T-4, T-5, T-6, T-7             | 93.50           | 197.08                     | 200.6                             | 117.08 - 107.08                           | Selma Chalk    | Semi-annually                   |
| SM22        | CSM                    | 14180.28                                            | 5830.04                                               | T-4, T-5, T-6, T-7             | 93.50           | 197.02                     | 200.54                            | 117.02 - 107.02                           | Selma Chalk    | Semi-annually                   |
| SM23        | CSM                    | 14548.28                                            | 6213.5                                                | T-4, T-5, T-6, T-7             | 55.00           | 172.89                     | 175.91                            | 135.89 - 120.89                           | Selma Chalk    | Semi-annually                   |
| SM23A       | CSM                    | 14557.82                                            | 6200.43                                               | T-4, T-5, T-6, T-7             | 68.50           | 172.64                     | 176.16                            | 117.64 - 107.64                           | Selma Chalk    | Semi-annually                   |
| SM24        | CSM                    | 14274.36                                            | 6472.32                                               | T-4, T-5, T-6, T-7             | 58.50           | 180.19                     | 183.58                            | 135.19 - 125.19                           | Selma Chalk    | Semi-annually                   |
| SM27        | CSM                    | 8796.86                                             | 8513.93                                               | T-22                           | 107.5           | 254                        | 255.69                            | 184 - 179,<br>166.5 - 161.5,<br>154 - 149 | Selma Chalk    | Semi-annually                   |
| SM28        | CSM                    | 8925.47                                             | 9266.76                                               | T-22                           | 97              | 238.9                      | 242.55                            | 176.9 - 169.9,<br>154.9 - 144.9           | Selma Chalk    | Semi-annually                   |
| SM29        | CSM                    | 9491.47                                             | 9200.56                                               | T-22                           | 103             | 244.37                     | 247.72                            | 169.37 - 164.37,<br>154.37 - 144.37       | Selma Chalk    | Semi-annually                   |
| SM30        | CSM                    | 10386.92                                            | 5351.478                                              | T-22                           | 122.94          | 192.4                      | 195.34                            | 82.4 - 72.4                               | Selma Chalk    | Semi-annually                   |
| SM31        | CSM                    | 9926.53                                             | 5372.605                                              | T-22                           | 125.43          | 207.8                      | 211.23                            | 140.8 - 134.8,<br>95.8 - 85.8             | Selma Chalk    | Semi-annually                   |
| SM32        | CSM                    | 9550.473                                            | 5323.801                                              | T-22                           | 120.19          | 209.7                      | 212.89                            | 152.7 - 147.7,<br>102.7 - 92.7            | Selma Chalk    | Semi-annually                   |
| SM33        | CSM                    | 8705.229                                            | 5913.173                                              | T-22                           | 112.95          | 204.43                     | 208.38                            | 125.43 - 95.43                            | Selma Chalk    | Semi-annually                   |
| SM34        | CSM                    | 8988.06                                             | 7307.31                                               | T-22                           | 93.5            | 249.1                      | 252.26                            | 166.10 - 156.10                           | Selma Chalk    | Semi-annually                   |
| RCRA6       | POC                    | 15729.3                                             | 7821.6                                                | Entire Site                    | 645.00          | 164.                       | 163.2                             | (-) 442 - 482                             | Eutaw          | Semi-annually                   |
| RCRA7       | POC                    | 13121.9                                             | 8187                                                  | Entire Site                    | 724.00          | 206.                       | 207.7                             | (-) 476 - 516                             | Eutaw          | Semi-annually                   |
| RCRA8       | BKG                    | 11212                                               | 552.54                                                | Entire Site                    | 719.00          | 131.                       | 141.44                            | (-) 537 - 577                             | Eutaw          | Semi-annually                   |
| RCRA9       | POC                    | 13266.18                                            | 9345.02                                               | Entire Site                    | 734.00          | 209.                       | 210.65                            | (-) 482 - 522                             | Eutaw          | Semi-annually                   |
| RCRA10A     | POC                    | 12893.63                                            | 11170.28                                              | Entire Site                    | 726             | 219.06                     | 221.31                            | (-) 359.94 - 502.54                       | Eutaw          | Semi-annually                   |
| RCRA5       | PGM                    | 8390.4                                              | 13120.98                                              | Entire Site                    | 736.00          | 213                        | 214.07                            | (-) 480 - 520                             | Eutaw          | N/A <sup>5</sup>                |
| M-3         | PGM                    | 14413.07                                            | 6200.32                                               | T-4, T-5, T-6, T-7             | 61.66           | 173.71                     | 178.71                            | 55.00 - 65.00                             | Selma Chalk    | N/A                             |
| PM-17       | PGM                    | 11388.82                                            | 5509.26                                               | T-16                           | 112.02          | 201.82                     | 204.82                            | 97.00 - 107.56                            | Selma Chalk    | N/A                             |
| PM-18       | PGM                    | 11104.51                                            | 5837.66                                               | T-16                           | 163.58          | 222.62                     | 225.62                            | 97.00 - 107.00                            | Selma Chalk    | N/A                             |
| M-54        | PGM                    | 11091.35                                            | 6684.71                                               | T-20                           | 154.80          | 242.06                     | 245.06                            | 79.69 - 89.54                             | Selma Chalk    | N/A                             |

TABLE IX.1 (continued)

| WELL NUMBER | WELL TYPE <sup>2</sup> | WELL LATITUDE<br>(State Plane Coordinates, Easting) | WELL LONGITUDE<br>(State Plane Coordinates, Northing) | UNIT(S) MONITORED <sup>3</sup> | WELL DEPTH (ft) | GROUND ELEVATION (ft. MSL) | TOP-OF-CASING ELEVATION (ft. MSL) | SCREENED INTERVAL (ft. MSL) | MONITORED ZONE | SAMPLING FREQUENCY <sup>4</sup> |
|-------------|------------------------|-----------------------------------------------------|-------------------------------------------------------|--------------------------------|-----------------|----------------------------|-----------------------------------|-----------------------------|----------------|---------------------------------|
| M-55        | PGM                    | 10823.63                                            | 6295.65                                               | T-21A                          | 170.25          | 245.85                     | 248.85                            | 79.64 - 89.54               | Selma Chalk    | N/A                             |
| M-56        | PGM                    | 14112.86                                            | 5860.67                                               | T-4, T-5, T-6, T-7             | 96.48           | 201.88                     | 204.88                            | 55.00 - 65.00               | Selma Chalk    | N/A                             |
| M-57        | PGM                    | 13795.75                                            | 7112                                                  | T-18                           | 156.59          | 204.28                     | 207.28                            | 48.75 - 58.60               | Selma Chalk    | N/A                             |
| M-58        | PGM                    | 12688.55                                            | 7047.96                                               | T-9                            | 110.50          | 249.95                     | 252.95                            | 148.58 - 158.43             | Selma Chalk    | N/A                             |
| M-59        | PGM                    | 13883.75                                            | 5673.26                                               | T-4, T-5, T-6, T-7             | 102.40          | 196.87                     | 199.87                            | 80.00 - 90.00               | Selma Chalk    | N/A                             |
| M-61        | PGM                    | 12994.73                                            | 6349.21                                               | T-9                            | 104.47          | 215.02                     | 218.02                            | 148.58 - 158.43             | Selma Chalk    | N/A                             |
| M-62        | PGM                    | 12499.47                                            | 6279.17                                               | T-8                            | 158.60          | 257.97                     | 260.97                            | 148.58 - 158.43             | Selma Chalk    | N/A                             |
| M-64        | PGM                    | 12288.77                                            | 6997.77                                               | T-10                           | 151.20          | 271.6                      | 274.6                             | 148.58 - 158.43             | Selma Chalk    | N/A                             |
| M-65        | PGM                    | 11624.82                                            | 7156.02                                               | T-11                           | 130.24          | 275.66                     | 278.66                            | 153.76 - 163.61             | Selma Chalk    | N/A                             |
| M-66        | PGM                    | 11422.69                                            | 6535.25                                               | T-12A                          | 118.62          | 249.99                     | 251.99                            | 149.80 - 159.60             | Selma Chalk    | N/A                             |
| M-68        | PGM                    | 12463.18                                            | 5267.95                                               | T-15                           | 117.60          | 198.93                     | 201.93                            | 129.88 - 134.78             | Selma Chalk    | N/A                             |
| M-69        | PGM                    | 13711.44                                            | 7441.22                                               | T-17                           | 143.30          | 230.69                     | 233.69                            | 120.00 - 129.85             | Selma Chalk    | N/A                             |
| SM05B       | PGM                    | 12684.41                                            | 6990.77                                               | T-9, T-10                      | 75.00           | 254.36                     | 256.5                             | 182.4 - 202.4               | Selma Chalk    | Semi-annually                   |
| SM05C       | PGM                    | 12700.06                                            | 6980.79                                               | T-9, T-10                      | 59.90           | 252.64                     | 253.92                            | 192.9 - 197.9               | Selma Chalk    | Semi-annually                   |
| SM05D       | PGM                    | 12689.51                                            | 6962.42                                               | T-9, T-10                      | 73.80           | 252.49                     | 255.28                            | 181.0 - 191.0               | Selma Chalk    | Semi-annually                   |
| SM05E       | PGM                    | 12645.81                                            | 6975.44                                               | T-9, T-10                      | 45.00           | 253.9                      | 256.96                            | 211.9 - 221.9               | Selma Chalk    | Semi-annually                   |
| SM18A       | PGM                    | 14217.12                                            | 5759.15                                               | T-4, T-5, T-6, T-7             | 48.60           | 203.3                      | 206.27                            | 158.3 - 148.3               | Selma Chalk    | N/A                             |
| SM18B       | PGM                    | 14222.8                                             | 5791.05                                               | T-4, T-5, T-6, T-7             | 47.70           | 201.7                      | 204.72                            | 158.7 - 147.7               | Selma Chalk    | N/A                             |
| SM18C       | PGM                    | 14193.01                                            | 5798.89                                               | T-4, T-5, T-6, T-7             | 43.60           | 198.9                      | 201.93                            | 159.9 - 149.9               | Selma Chalk    | N/A                             |
| SM18D       | PGM                    | 14184.5                                             | 5776.88                                               | T-4, T-5, T-6, T-7             | 43.80           | 200.1                      | 203.14                            | 160.6 - 150.6               | Selma Chalk    | N/A                             |

<sup>1</sup> Note: All wells added to the monitoring system(s) pursuant to Part IX of this permit and/or as stipulated in Section E-5a and Appendix E-1, Figure E-1.2 of the permit application shall be added to this Table upon installation.

<sup>2</sup> Well Type:

POC - Point of Compliance Wells

PGM - Piezometers and/or General Monitoring Wells

BKG - Background Wells

CSM - Selma Chalk Surveillance Monitoring Wells

<sup>3</sup> "Unit(s) Monitored" indicates primary unit(s) monitored by well; however, well may also monitor other unit(s) in the area.

<sup>4</sup> Groundwater elevation measurements are required quarterly pursuant to Condition IX.B.2.a.

<sup>5</sup> "N/A" indicates only groundwater elevation measurements are required pursuant to Condition IX.B.2.a.

<sup>6</sup> Well SMBG01 was operated as a background monitoring well for data collected prior to May 1996 (opening of Cell 1 of Trench 22).

**TABLE IX.2**  
**GROUNDWATER QUALITY MONITORING CONSTITUENTS**  
**(EUTAW)**

| HAZARDOUS<br>CONSTITUENT   | UNIT <sup>1</sup> | DATE<br>ADDED <sup>2</sup> | BACKGROUND<br>CONCENTRATION <sup>3</sup><br>(µg/l) | PQL <sup>4</sup><br>(µg/l) | MCL/ACL <sup>5</sup><br>(µg/l) |
|----------------------------|-------------------|----------------------------|----------------------------------------------------|----------------------------|--------------------------------|
| 1,1-Dichloroethane         |                   | N/A                        | MDL                                                | 5.00                       | N/E <sup>6</sup>               |
| 1,2-Dichlorobenzene        |                   | N/A                        | MDL                                                | 10.00                      | N/E <sup>6</sup>               |
| 1,2-Dichloroethane         |                   | N/A                        | MDL                                                | 5.00                       | 5.00                           |
| 1,2-trans-Dichloroethylene |                   | N/A                        | MDL                                                | 5.00                       | 100.00                         |
| 1,2,4-Trichlorobenzene     |                   | N/A                        | MDL                                                | 10.00                      | 70.00                          |
| Benzene                    |                   | N/A                        | MDL                                                | 5.00                       | 5.00                           |
| Chloroform                 |                   | N/A                        | MDL                                                | 5.00                       | 80.00                          |
| Methylene Chloride         |                   | N/A                        | MDL                                                | 5.00                       | N/E <sup>6</sup>               |
| Toluene                    |                   | N/A                        | MDL                                                | 5.00                       | 1000.00                        |
| Tetrachloroethylene        |                   | N/A                        | MDL                                                | 5.00                       | 5.00                           |
| Trichloroethylene          |                   | N/A                        | MDL                                                | 5.00                       | 5.00                           |
| Vinyl Chloride             |                   | N/A                        | MDL                                                | 2.00                       | 2.00                           |
|                            |                   |                            |                                                    |                            |                                |
| Arsenic                    |                   | N/A                        | MDL                                                | 10.00                      | 10.00                          |
| Chromium                   |                   | N/A                        | MDL                                                | 70.00                      | 100.00                         |
| Nickel                     |                   | N/A                        | MDL                                                | 50.00                      | N/E <sup>6</sup>               |
| Vanadium                   |                   | N/A                        | MDL                                                | 80.00                      | N/E <sup>6</sup>               |

<sup>1</sup> Identifies the unit(s) at which the given constituent must be monitored.

<sup>2</sup> Date constituent added to monitoring list pursuant to Condition IX.C.2.b.v. of this permit. 'N/A' indicates that the constituent is included as a part of the base monitoring program at the time of permit issuance, and; therefore, is not subject to removal pursuant to Condition IX.C.2.b.v. of this permit.

<sup>3</sup> Concentration limit is the higher of limits listed below and the method detection limit (MDL). The MDL for a specific constituent must not exceed the Drinking Water MCL, if in existence for that constituent.

<sup>4</sup> PQL = Practical Quantitation Limit.

<sup>5</sup> MCL = Maximum Concentration Limit; ACL = Alternate Concentration Limit.

<sup>6</sup> NE = Not Established.

**TABLE IX.3****ADDITIONAL MONITORING PARAMETERS**

| <b>PARAMETER</b>     | <b>UNIT OF MEASURE</b> | <b>LOCATION</b>    |
|----------------------|------------------------|--------------------|
| Temperature          | (degrees F or C)       | Field <sup>1</sup> |
| Specific Conductance | (Mhos/cm)              | Field <sup>1</sup> |
| pH                   | (S.U.) Standard Units  | Field <sup>1</sup> |

<sup>1</sup> To be submitted as raw data in the annual reports required by Condition IX.B.6.b.

**TABLE IX.4****GROUNDWATER PROTECTION STANDARD****[RESERVED]**

**[Note: Since the applicable groundwater monitoring program for the Eutaw aquifer is Detection Monitoring (as specified in Condition IX.A.3. of this permit), the Groundwater Protection Standard as identified in this Table is not currently applicable.]**

TABLE IX.5.

## SELMA CHALK GROUNDWATER MONITORING PARAMETERS

| HAZARDOUS<br>CONSTITUENT   | UNIT <sup>1</sup> | DATE<br>ADDED <sup>2</sup> | BACKGROUND<br>CONCENTRATION <sup>3</sup><br>(µg/l) | PQL <sup>4</sup><br>(µg/l) | MCL/ACL <sup>5</sup><br>(µg/l) |
|----------------------------|-------------------|----------------------------|----------------------------------------------------|----------------------------|--------------------------------|
| Benzene                    |                   | N/A                        | MDL                                                | 5.00                       | 5.00                           |
| Bromoform                  |                   | N/A                        | MDL                                                | 5.00                       | N/A <sup>7</sup>               |
| Carbon Tetrachloride       |                   | N/A                        | MDL                                                | 5.00                       | 5.00                           |
| Chlorobenzene              |                   | N/A                        | MDL                                                | 5.00                       | 110.00                         |
| Chlorodibromomethane       |                   | N/A                        | MDL                                                | 5.00                       | N/A <sup>7</sup>               |
| Chloroethane               |                   | N/A                        | MDL                                                | 10.00                      | N/E <sup>8</sup>               |
| 2-Chloroethylvinyl ether   |                   | N/A                        | MDL                                                | 10.00                      | N/E <sup>8</sup>               |
| Chloroform                 |                   | N/A                        | MDL                                                | 5.00                       | N/A <sup>7</sup>               |
| Dichlorobromomethane       |                   | N/A                        | MDL                                                | 5.00                       | N/A <sup>7</sup>               |
| Dichlorodifluoromethane    |                   | N/A                        | MDL                                                | 5.00                       | N/E <sup>8</sup>               |
| 1,2-Dichlorobenzene        |                   | N/A                        | MDL                                                | 10.00                      | 600.00                         |
| 1,1-Dichloroethane         |                   | N/A                        | MDL                                                | 5.00                       | N/E <sup>8</sup>               |
| 1,2-Dichloroethane         |                   | N/A                        | MDL                                                | 5.00                       | 5.00                           |
| 1,1-Dichloroethylene       |                   | N/A                        | MDL                                                | 5.00                       | 7.00                           |
| 1,2-Dichloropropane        |                   | N/A                        | MDL                                                | 5.00                       | 5.00                           |
| cis-1,3-Dichloropropylene  |                   | N/A                        | MDL                                                | 5.00                       | N/E <sup>8</sup>               |
| Ethylbenzene               |                   | N/A                        | MDL                                                | 5.00                       | 700.00                         |
| Methyl Bromide             |                   | N/A                        | MDL                                                | 10.00                      | N/E <sup>8</sup>               |
| Methyl Chloride            |                   | N/A                        | MDL                                                | 10.00                      | N/E <sup>8</sup>               |
| Methylene Chloride         |                   | N/A                        | MDL                                                | 5.00                       | 5.00                           |
| 1,1,2,2-Tetrachloroethane  |                   | N/A                        | MDL                                                | 5.00                       | N/E <sup>8</sup>               |
| Tetrachloroethylene        |                   | N/A                        | MDL                                                | 5.00                       | 5.00                           |
| Toluene                    |                   | N/A                        | MDL                                                | 5.00                       | 1000.00                        |
| 1,2-trans-Dichloroethylene |                   | N/A                        | MDL                                                | 5.00                       | 100.00                         |
| 1,1,1-Trichloroethane      |                   | N/A                        | MDL                                                | 5.00                       | 200.00                         |

TABLE IX.5. (continued)

| HAZARDOUS<br>CONSTITUENT    | UNIT <sup>1</sup> | DATE<br>ADDED <sup>2</sup> | BACKGROUND<br>CONCENTRATION <sup>3</sup><br>(µg/l) | PQL <sup>4</sup><br>(µg/l) | MCL/ACL <sup>5</sup><br>(µg/l) |
|-----------------------------|-------------------|----------------------------|----------------------------------------------------|----------------------------|--------------------------------|
| 1,1,2-Trichloroethane       |                   | N/A                        | MDL                                                | 5.00                       | 5.00                           |
| Trichloroethylene           |                   | N/A                        | MDL                                                | 5.00                       | 5.00                           |
| Trichlorofluoromethane      |                   | N/A                        | MDL                                                | 5.00                       | N/E <sup>8</sup>               |
| Vinyl Chloride              |                   | N/A                        | MDL                                                | 10.00                      | 2.00                           |
| trans-1,3-Dichloropropylene |                   | N/A                        | MDL                                                | 5.00                       | N/E <sup>8</sup>               |
|                             |                   |                            |                                                    |                            |                                |
| Arsenic                     |                   | N/A                        | 3.5 <sup>6</sup>                                   | 10.00                      | 10.00                          |
| Chromium                    |                   | N/A                        | 10.9 <sup>6</sup>                                  | 7.00                       | 100.00                         |
| Nickel                      |                   | N/A                        | 18.1 <sup>6</sup>                                  | 15.00                      | N/E <sup>8</sup>               |
| Vanadium                    |                   | N/A                        | MDL                                                | 8.00                       | N/A                            |

<sup>1</sup> Identifies the unit(s) at which the given constituent must be monitored.

<sup>2</sup> Date constituent added to monitoring list pursuant to Condition IX.F.2.c.v. of this permit. 'N/A' indicates that the constituent is included as a part of the base monitoring program at the time of permit issuance, and; therefore, is not subject to removal pursuant to Condition IX.F.2.c.vi. of this permit.

<sup>3</sup> Concentration limit is the higher of limits listed below and the method detection limit (MDL). The MDL for a specific constituent must not exceed the Drinking Water MCL, if in existence for that constituent.

<sup>4</sup> PQL = Practical Quantitation Limit.

<sup>5</sup> MCL = Maximum Concentration Limit; ACL = Alternate Concentration Limit.

<sup>6</sup> Source of value = Facility specific background (see Section E-5d of the permit application).

<sup>7</sup> MCL for total Trihalomethanes (THM) = 80.00µg/l (<sup>6</sup>).

<sup>8</sup> N/E = Not Established.

**PART X****SOLID WASTE MANAGEMENT UNIT  
IDENTIFICATION AND EVALUATION****X.A. APPLICABILITY**

The Conditions of this Part apply to:

1. The solid waste management units (SWMUs) and areas of concern (AOCs) identified in Table X.1, which require investigation and/or remediation;
2. The SWMUs identified in Table X.2, which require no further investigation under this permit at this time;
3. Any additional SWMUs or AOCs discovered during the course of groundwater monitoring, field investigations, environmental audits, or other means; and,
4. Contamination beyond the facility boundary, if applicable. The Permittee shall implement corrective actions beyond the facility boundary where necessary to protect human health and the environment, unless the Permittee demonstrates to the satisfaction of the Department that, despite the Permittee's best efforts, as determined by the Department, the Permittee was unable to obtain the necessary permission to undertake such actions. The Permittee is not relieved of all responsibility to clean up a release that has migrated beyond the facility boundary where off-site access is denied. On-site measures to address such releases will be determined on a case-by-case basis. Assurances of financial responsibility for completion of such off-site corrective action will be required.

**X.B. NOTIFICATION AND ASSESSMENT REQUIREMENTS FOR NEWLY IDENTIFIED  
SWMUs AND AOCs**

1. The Permittee shall notify the Department in writing, within 15 calendar days of discovery, of any additional AOC(s) as described under Permit Condition X.A.3. The notification shall include, at a minimum, the location of the AOC(s) and all available information pertaining to the nature of the release (*e.g.*, media affected, hazardous constituents released, magnitude of release, *etc.*). If the Department determines that further investigation of an AOC is required, the permit will be modified in accordance with ADEM Admin. Code Rule 335-14-8-.04(2).
2. The Permittee shall notify the Department in writing, within 15 calendar days of discovery, of any additional SWMUs as described under Permit Condition X.A.3.
3. The Permittee shall prepare and submit to the Department, within 90 calendar days of notification, a SWMU Assessment Report (SAR) for each SWMU identified under Permit Condition X.B.2. At a minimum, the SAR shall provide the following information:
  - a. Location of unit(s) on a topographic map of appropriate scale such as required under ADEM Admin. Code Rule 335-14-8-.02(5)(b)19.

- b. Designation of type and function of unit(s).
  - c. General dimensions, capacities and structural description of unit(s) (supply any available plans/drawings).
  - d. Dates that the unit(s) was operated.
  - e. Specification of all wastes that have been managed at/in the unit(s) to the extent available. Include any available data on hazardous constituents in the wastes.
  - f. All available information pertaining to any release of hazardous waste or hazardous constituents from such unit(s) (to include groundwater data, soil analyses, air, and/or surface water data).
4. Based upon the results of the SAR, the Department shall determine the need for further investigations at the SWMUs covered in the SAR. If the Department determines that such investigations are needed, the Permittee shall initiate an investigation as outlined in Permit Condition X.D.1 immediately upon receiving notification of the Department's determination.

**X.C. NOTIFICATION REQUIREMENTS FOR NEWLY DISCOVERED RELEASES AT PREVIOUSLY IDENTIFIED SWMUs or AOCs**

- 1. The Permittee shall notify the Department in writing of any newly discovered release(s) of hazardous waste or hazardous constituents discovered during the course of groundwater monitoring, field investigations, environmental audits, or other means, within 15 calendar days of discovery. Such newly discovered releases may be from SWMUs or AOCs identified in Permit Condition X.A.2 or SWMUs or AOCs identified in Permit Condition X.A.3 for which further investigation was not required.
- 2. If the Department determines that further investigation of the SWMUs or AOCs is needed, the Permittee shall initiate an investigation as outlined in Permit Condition X.D. immediately upon receiving notification of the Department's determination.

**X.D. RCRA FACILITY INVESTIGATION (RFI)**

- 1. The Permittee must perform a RCRA Facility Investigation (RFI) for any SWMU and AOC identified by the Department in accordance with Permit Conditions X.A.1, X.B.4, and X.C.2.
- 2. The RFI must completely identify the concentration of hazardous constituents released from each SWMU and AOC and fully delineate the area where such hazardous constituents have come to be located.
- 3. The RFI must fully characterize the nature and extent of contamination released from each SWMU or AOC under investigation.
- 4. The RFI must be performed in a manner consistent with the most recent edition of the Alabama Environmental Investigation and Remediation Guidance.

5. Except as provided by Permit Condition X.D.6., the RFI must be completed within 180 calendar days from the effective date of this permit, or, for SWMUs or AOCs identified pursuant to Permit Condition X.B. and C., within 180 calendar days from the receipt of notification from the Department that an RFI is required. If, prior to the effective date of this permit, the Department has approved a work plan that includes a schedule for completing the RFI, the RFI shall be completed in accordance with the approved schedule.
6. RFI Schedule of Compliance
  - a. For RFIs expected to require greater than 180 calendar days to complete, the Permittee may submit a schedule of compliance subject to Departmental approval and/or modification.
  - b. Submittal of an RFI Schedule of Compliance does not delay or otherwise postpone the Permittee's obligation to initiate the RFI.
  - c. The Schedule of Compliance must include:
    - i. A detailed narrative discussion which explains why the RFI cannot be completed within 180 days; and,
    - ii. A detailed and chronological listing of milestones, with estimated durations that provides sufficient information to track the progress of the investigation.
  - d. The RFI Schedule of Compliance shall be reviewed by the Department in accordance with Permit Condition X.G.
  - e. The Permittee shall complete the RFI in accordance with the approved RFI Schedule of Compliance.
7. RFI Progress Reports
  - a. For an RFI being conducted in accordance with the approved RFI Schedule of Compliance, the Permittee must submit progress reports on a monthly basis.
  - b. The RFI Progress Reports must include:
    - i. A description of the RFI activities completed during the reporting period;
    - ii. Summaries of any problems or potential problems encountered during the reporting period;
    - iii. Actions taken to rectify problems;
    - iv. Changes in relevant personnel;
    - v. Projected work for the next reporting period;

- vi. Any proposed revisions to the RFI Schedule of Compliance. Modifications of the RFI Schedule of Compliance are subject to approval by the Department; and,
- vii. A summary of any data collected during the reporting period, including:
  - I. The location of each sampling point identified on a site map;
  - II. The concentration of each hazardous constituent detected at each sampling point; and,
  - III. Submittal of RFI Progress Reports, work plans, or other documents during the RFI does not alter the approved RFI Schedule of Compliance.

8. RFI Reports

- a. The Permittee shall prepare and submit to the Department an RFI Report within 60 calendar days from the completion of investigation activities in accordance with the approved RFI Schedule of Compliance, if applicable.
- b. The RFI Report must provide a detailed description of all required elements of the investigation as described in the most recent edition of the Alabama Environmental Investigation and Remediation Guidance.
- c. The RFI Report shall be reviewed by the Department in accordance with Permit Condition X.G.

**X.E. SELECTION OF CORRECTIVE MEASURES AND PERMIT MODIFICATION**

- 1. The Permittee shall develop and submit to the Department a Corrective Measures Implementation (CMI) Plan for any areas of the Permittee's site where hazardous constituents have come to be located at concentrations exceeding those appropriate for the protection of human health and the environment. The CMI Plan must include all applicable elements of the proposed remedy pursuant to the most recent edition of the Alabama Environmental Investigation and Remediation Guidance.
- 2. The CMI Plan shall be submitted to the Department within 120 calendar days following the Permittee's submittal of the RFI Report indicating that hazardous constituents have come to be located at any area of the Permittee's facility, or beyond the facility, at concentrations exceeding those appropriate for the protection of human health and the environment, or within 120 calendar days following notification from the Department that a CMI Plan is required, whichever occurs earlier.
- 3. The CMI Plan shall be submitted along with a request for permit modification pursuant to ADEM Admin. Code R. 335-14-8-.04(2), and shall include any applicable fees pursuant to ADEM Admin. Code R. 335-1-6. This modification will serve to incorporate the proposed final remedy, including all procedures necessary to implement and monitor the remedy, into this permit.

4. Within 120 calendar days after this Permit has been modified in accordance with Permit Condition X.E.2., the Permittee shall demonstrate financial assurance for completing the approved remedy.

#### **X.F. INTERIM MEASURES (IM)**

1. IM Work Plan(s)
  - a. Upon notification by the Department, the Permittee shall prepare and submit an Interim Measures (IM) Work Plan for any SWMU or AOC that the Department determines is necessary. IM are necessary in order to minimize or prevent further migration of contaminants and limit human and environmental exposure to contaminants while long-term corrective measures are evaluated and, if necessary, implemented. The IM Work Plan shall be submitted within 30 calendar days of such notification and shall include the elements listed in Permit Condition X.F.1.b. Such IM may be conducted concurrently with investigations required under the terms of this permit. The Permittee may initiate IM by submitting an IM Work Plan for approval and reporting in accordance with the requirements under Permit Condition X.F.
  - b. The IM Work Plan shall ensure that the IM are designed to mitigate any current or potential threat(s) to human health or the environment and is consistent with and integrated into any long-term solution at the facility. The IM Work Plan shall include: the IM objectives, procedures for implementation (including any designs, plans, or specifications), and schedules for implementation.
  - c. The IM Work Plan must be approved by the Department, in writing, prior to implementation. The Department shall specify the start date of the IM Work Plan schedule in the letter approving the IM Work Plan.
  - d. The IM Report shall be reviewed by the Department in accordance with Permit Condition X.G.
2. IM Implementation
  - a. The Permittee shall implement the IM in accordance with the approved IM Work Plan.
  - b. The Permittee shall give notice to the Department as soon as possible of any planned changes, reductions or additions to the IM Work Plan.
  - c. Final approval of corrective action required under ADEM Admin. Code Rule 335-14-5-.06(12), which is achieved through IM, shall be in accordance with ADEM Admin. Code Rule 335-14-8-.04(2) and Permit Condition X.E.
3. IM Reports
  - a. If the time required for completion of IM is greater than one year, the Permittee shall provide the Department with Progress Reports at intervals specified in the approved work plan. The Progress Reports shall, at a minimum, contain the following information:

- i. A description of the portion of the IM completed;
  - ii. Summaries of any deviations from the IM Work Plan during the reporting period;
  - iii. Summaries of any problems or potential problems encountered during the reporting period;
  - iv. Projected work for the next reporting period; and,
  - v. Copies of laboratory/monitoring data.
- b. The Permittee shall prepare and submit the IM Report to the Department within 90 calendar days of completion of IM conducted under Permit Condition X.F. The IM Report shall, at a minimum, contain the following information:
- i. A description of IM implemented;
  - ii. Summaries of results;
  - iii. Summaries of all problems encountered;
  - iv. Summaries of accomplishments and/or effectiveness of IM; and,
  - v. Copies of all relevant laboratory or monitoring data, *etc.* in accordance with Permit Condition I.C.10.

#### **X.G. SUBMITTALS**

1. All work plans, reports, schedules, and other documents ("submittals") required by this permit shall be subject to approval by the Department to assure that such submittals and schedules are consistent with the requirements of this Permit and with applicable regulations and guidance. The Permittee shall revise all submittals and schedules as directed by the Department.
2. The Department will review all submittals in accordance with the conditions of this permit. The Department will notify the Permittee in writing of any submittal that is disapproved, and the basis therefore. If the Department disapproves a submittal, the Department shall (1) notify the Permittee in writing of the submittal's deficiencies and specify a due date for submission of a revised submittal, (2) revise the submittal and notify the Permittee of the revisions, or (3) conditionally approve the submittal and notify the Permittee of the conditions. Permit Condition X.H. shall apply only to submittals that have been disapproved and revised by the Department, or that have been disapproved by the Department, then revised and resubmitted by the Permittee, and again disapproved by the Department.
3. All submittals shall be submitted within the time frame specified by the Department and in accordance with the approved schedule of compliance. Extensions of the due date for submittals may be granted by the Department based on the Permittee's demonstration that sufficient justification for the extension exists.

4. All submittals required by this permit shall be signed and certified in accordance with ADEM Admin. Code Rule 335-14-8-.02(2).
5. Two (2) copies of all submittals shall be provided by the Permittee to the Department in accordance with Permit Condition I.J.

#### **X.H. DISPUTE RESOLUTION**

Notwithstanding any other provision in this permit, in the event the Permittee disagrees, in whole or in part, with the Department's revision of a submittal or disapproval of any revised submittal required by this Part, the following may, at the Permittee's discretion apply:

1. In the event that the Permittee chooses to invoke the provisions of this section, the Permittee shall notify the Department in writing within 30 calendar days of receipt of the Department's revision of a submittal or disapproval of a revised submittal. Such notice shall set forth:
  - a. The specific matters in dispute;
  - b. The position the Permittee asserts should be adopted as consistent with the requirements of this permit;
  - c. The basis for the Permittee's position; and,
  - d. Any matters considered necessary for the Department's determination.
2. The Department and the Permittee shall have an additional 30 calendar days from the Department's receipt of the notification provided for in Permit Condition X.H.1. to meet or confer to resolve any disagreement.
3. In the event agreement is reached, the Permittee shall submit and implement the revised submittal in accordance with and within the time frame specified in such agreement.
4. If agreement is not reached within the 30-day period, the Department will notify the Permittee in writing of his/her decision on the dispute, and the Permittee shall comply with the terms and conditions of the Department's decision in the dispute. For the purposes of this provision in this permit, the responsibility for making this decision shall not be delegated below the Land Division Chief.
5. With the exception of those conditions under dispute, the Permittee shall proceed to take any action required by those portions of the submission and of this permit that the Department determines are not affected by the dispute.

**Table X.1**

The following Solid Waste Management Unit(s) (SWMU) and/or Area(s) of Concern (AOC) numbers and descriptions correspond with those noted in the RCRA Facility Assessment (RFA) Report. Where discrepancies exist, the permit will take precedence.

**List of SWMUs and AOCs requiring a RCRA Facility Investigation (RFI):**

| <b>SWMU/AOC<br/>NUMBER<sup>1</sup></b> | <b>SWMU/AOC NAME</b>                       | <b>POTENTIALLY<br/>AFFECTED<br/>MEDIA<sup>2</sup></b> |
|----------------------------------------|--------------------------------------------|-------------------------------------------------------|
| 1A – 1F                                | Landfills (Trenches T-1, T-3, through T-7) | A, SS, SW, S, GW                                      |
| 19                                     | Drainage Ditches                           | A, SS, SW, S, GW                                      |
| 21C – 21E                              | Former Lagoons (Units L-3, L-4, and L-5)   | A, SS, SW, S, GW                                      |

<sup>1</sup> The RFI Report(s) has been approved by the Department.

<sup>2</sup> A-Air, SS-Sediment, SW-Surface Water, S-Soil, GW-Groundwater.

**Table X.2**

The following Solid Waste Management Unit(s) (SWMU) and/or Area(s) of Concern (AOC) numbers and descriptions correspond with those noted in the RCRA Facility Assessment (RFA) Report. Where discrepancies exist, the permit will take precedence.

**List of SWMUs and AOCs requiring no further action at this time:**

| <b>SWMU/AOC NUMBER</b> | <b>SWMU/AOC NAME</b>                                                   | <b>POTENTIALLY AFFECTED MEDIA</b> |
|------------------------|------------------------------------------------------------------------|-----------------------------------|
| 3A – 3L                | Tanks T-501, T-502, T-504, T-507, through T-515                        | None                              |
| 3N – 3R                | Tanks T-601 through T-605                                              | None                              |
| 3S                     | Frac Tank                                                              | None                              |
| 3X – 3Y                | Tanks T-638, T-639                                                     | None                              |
| 3Z – 3AA               | Tanks T-711, T-712                                                     | None                              |
| 3PPP                   | Tank T-A                                                               | None                              |
| 3VVV                   | Unit 701                                                               | None                              |
| 3WWW                   | Unit 200                                                               | None                              |
| 3ZZZ                   | Waste Oil Tank T-303                                                   | None                              |
| 3AAAA                  | Waste Oil Tank T-402                                                   | None                              |
| 4                      | Laboratory Waste Containers                                            | None                              |
| 7                      | PK-1000 Bulk Sampling Stations                                         | None                              |
| 8A                     | PK-700 Staging Area                                                    | None                              |
| 8B                     | PK-1000 Staging Area                                                   | None                              |
| 9E                     | OBA Canister Shredder                                                  | None                              |
| 10                     | Drum Crusher Dispersion Unit (CDU)                                     | None                              |
| 12                     | Pugmill Solidification System                                          | None                              |
| 13                     | Mixing Pit                                                             | None                              |
| 14A                    | Former Truck Wash Unit                                                 | None                              |
| 14C                    | Wheel Wash Unit                                                        | None                              |
| 15                     | PCB Decanting Unit                                                     | None                              |
| 16A – 16TT             | Satellite Accumulation Areas                                           | None                              |
| 17A – 17M              | Loading/Unloading Areas                                                | None                              |
| 18A – 18II             | Sumps                                                                  | None                              |
| 20A – 20B              | Waste transport vehicles                                               | None                              |
| 22A – 22D              | Former decant tanks                                                    | None                              |
| 23                     | Super dock/PCB tanks                                                   | None                              |
| 24                     | Former incinerator and scrubber                                        | None                              |
| 25                     | Paint and wash building                                                | None                              |
| 26                     | Heavy equipment maintenance area<br>satellite accumulation areas (SAA) | None                              |
| 27                     | Equipment boneyard                                                     | None                              |
| 28                     | Construction debris pile                                               | None                              |

**Table X.2 (continued)**

| <b>SWMU/AOC<br/>NUMBER</b> | <b>SWMU/AOC NAME</b>      | <b>POTENTIALLY<br/>AFFECTED<br/>MEDIA</b> |
|----------------------------|---------------------------|-------------------------------------------|
| 29                         | Safety-Kleen units        | None                                      |
| 32                         | Unpaved trailer lot       | None                                      |
| 33                         | General refuse dumpsters  | None                                      |
| 2A – 2J                    | Sedimentation Basins 1-13 | None                                      |
| 30                         | Underground Pipe Chase    | None                                      |
| 31                         | Silt Stockpile Area       | None                                      |

**Table X.3**

The following Solid Waste Management Unit(s) (SWMU) and/or Area(s) of Concern (AOC) numbers and descriptions correspond with those noted in the RCRA Facility Assessment (RFA) Report. Where discrepancies exist, the permit will take precedence.

**List of SWMUs and AOCs regulated by Parts III through Part X of this permit and/or closed under approved AHWMMMA closures plans.**

| <b>SWMU/AOC NUMBER</b> | <b>SWMU/AOC NAME</b>                           | <b>POTENTIALLY AFFECTED MEDIA<sup>1</sup></b> |
|------------------------|------------------------------------------------|-----------------------------------------------|
| 1G                     | Trench 8                                       | A, SS, SW, S, GW                              |
| 1H                     | Trench 9                                       | A, SS, SW, S, GW                              |
| 1I                     | Trench 10                                      | A, SS, SW, S, GW                              |
| 1J                     | Trench 11                                      | A, SS, SW, S, GW                              |
| 1K                     | Trench 12                                      | A, SS, SW, S, GW                              |
| 1L                     | Trench 12A                                     | A, SS, SW, S, GW                              |
| 1M                     | Trench 13                                      | A, SS, SW, S, GW                              |
| 1N                     | Trench 13A                                     | A, SS, SW, S, GW                              |
| 1O                     | Trench 14                                      | A, SS, SW, S, GW                              |
| 1P                     | Trench 15                                      | A, SS, SW, S, GW                              |
| 1Q                     | Trench 16                                      | A, SS, SW, S, GW                              |
| 1R                     | Trench 17                                      | A, SS, SW, S, GW                              |
| 1S                     | Trench 18                                      | A, SS, SW, S, GW                              |
| 1T                     | Trench 19                                      | A, SS, SW, S, GW                              |
| 1U                     | Trench 20                                      | A, SS, SW, S, GW                              |
| 1V                     | Trench 21                                      | A, SS, SW, S, GW                              |
| 1W                     | Trench 22                                      | A, SS, SW, S, GW                              |
| 3M                     | Tank T-520                                     | A, SS, SW, S, GW                              |
| 3T – 3V                | Tanks T-634 through T-636                      | A, SS, SW, S, GW                              |
| 3BB – 3MM              | Tanks T-714 through T-722, T-724 through T-726 | A, SS, SW, S, GW                              |
| 3NN – 3QQ              | Tanks T-901 through T-904                      | A, SS, SW, S, GW                              |
| 3RR                    | Wash Water Tank                                | A, SS, SW, S, GW                              |
| 3SS – 3TT              | Tanks T-1101, T-1102                           | A, SS, SW, S, GW                              |
| 3UU – 3VV              | Tanks T-1201, T-1202                           | A, SS, SW, S, GW                              |
| 3WW – 3XX              | Tanks T-1201A, T-1202A                         | A, SS, SW, S, GW                              |
| 3ZZ – 3OOO             | Tanks T-1405 through T-1420                    | A, SS, SW, S, GW                              |
| 3QQQ                   | Replacement Tank T-A                           | A, SS, SW, S, GW                              |
| 3RRR – 3SSS            | Tanks T-1701, T-1702                           | A, SS, SW, S, GW                              |
| 3TTT                   | Tank T-2001                                    | A, SS, SW, S, GW                              |
| 3UUU                   | Tank T-2004                                    | A, SS, SW, S, GW                              |
| 3XXX                   | Former Tank B                                  | A, SS, SW, S, GW                              |
| 3YYY                   | Former Tank C                                  | A, SS, SW, S, GW                              |
| 5A                     | Unit 1100 Stabilization Unit                   | A, SS, SW, S, GW                              |

**Table X.3 (continued)**

| <b>SWMU/AOC<br/>NUMBER</b> | <b>SWMU/AOC NAME</b>                  | <b>POTENTIALLY<br/>AFFECTED<br/>MEDIA<sup>1</sup></b> |
|----------------------------|---------------------------------------|-------------------------------------------------------|
| 5B                         | Unit 1200 Stabilization Unit          | A, SS, SW, S, GW                                      |
| 5C                         | Unit 1200A Stabilization<br>Unit      | A, SS, SW, S, GW                                      |
| 5D                         | Unit 2000 Stabilization Unit          | A, SS, SW, S, GW                                      |
| 6A                         | Unit 406 Container Storage<br>Area    | A, SS, SW, S, GW                                      |
| 6B                         | Unit 600 Container Storage<br>Area    | A, SS, SW, S, GW                                      |
| 6C                         | Unit 603 Container Storage<br>Area    | A, SS, SW, S, GW                                      |
| 6D                         | Unit 604 Container Storage<br>Area    | A, SS, SW, S, GW                                      |
| 6E                         | Unit 700 Container Storage<br>Area    | A, SS, SW, S, GW                                      |
| 6F                         | Unit 702 Container Storage<br>Area    | A, SS, SW, S, GW                                      |
| 6G                         | Unit 1200A Container<br>Storage Area  | A, SS, SW, S, GW                                      |
| 6H                         | Unit 2200 Container Storage<br>Area   | A, SS, SW, S, GW                                      |
| 6I                         | Area 13-14 Container<br>Storage Area  | A, SS, SW, S, GW                                      |
| 6J                         | Area 15 Container Storage<br>Area     | A, SS, SW, S, GW                                      |
| 9A                         | Unit 600 Capacitor Shredder           | A, SS, SW, S, GW                                      |
| 9B                         | Unit 700 Decant Shredder              | A, SS, SW, S, GW                                      |
| 9C                         | Unit 1200 Shredder                    | A, SS, SW, S, GW                                      |
| 9D                         | Unit 2000 Shredder                    | A, SS, SW, S, GW                                      |
| 10                         | Drum Crusher Dispersion<br>Unit (CDU) | A, SS, SW, S, GW                                      |
| 11                         | Solvent Recovery System               | A, SS, SW, S, GW                                      |
| 14B                        | Former Truck Wash<br>Impoundment      | A, SS, SW, S, GW                                      |
| 15                         | PCB Decanting Unit                    | A, SS, SW, S, GW                                      |
| 21A                        | Former Lagoon L-1                     | A, SS, SW, S, GW                                      |
| 21B                        | Former Lagoon L-2                     | A, SS, SW, S, GW                                      |
| 21F                        | Former Lagoon L-6                     | A, SS, SW, S, GW                                      |
| 21G                        | Former Lagoon L-7                     | A, SS, SW, S, GW                                      |
| 34                         | Unit 700 Solidification Unit          | A, SS, SW, S, GW                                      |
| 35                         | Unit 700 Decanting Units              | A, SS, SW, S, GW                                      |

**Table X.3 (continued)**

| <b>SWMU/AOC<br/>NUMBER</b> | <b>SWMU/AOC NAME</b>                                 | <b>POTENTIALLY<br/>AFFECTED<br/>MEDIA<sup>1</sup></b> |
|----------------------------|------------------------------------------------------|-------------------------------------------------------|
| 36                         | Former Incineration<br>Scrubber Blown-Down<br>Lagoon | A, SS, SW, S, GW                                      |
| 37                         | Tipper Hopper                                        | A, SS, SW, S, GW                                      |

<sup>1</sup> A-Air, SS-Sediment, SW-Surface Water, S-Soil, GW-Groundwater.

**PART XI****CORRECTIVE MEASURES IMPLEMENTATION****XI.A. APPLICABILITY**

The conditions of this Part apply to SWMUs and AOCs identified in Table XI.1.

**XI.B. GENERAL CONDITIONS**

1. The Permittee is required to perform corrective measures for the SWMUs and AOCs identified in Condition XI.A. The approved remedy for these defined units, waterway areas, or land parcels, includes any and all actions set forth in this permit and in the approved Interim Measures Plans, Corrective Measures Studies (CMSs), and Corrective Measures Implementation (CMI) Plans approved by the Department, as noted below:

**Table XI.1.**

| Applicable SWMU/AOC* | CMS/CMI | Approval Date |
|----------------------|---------|---------------|
|                      |         |               |

\* Currently no SWMU/AOC is under CMI.

2. Remedial Cleanup Levels

Upon approval, pursuant to Condition X.E., of a CMI Plan designating applicable cleanup level(s), the cleanup level(s) for the areas specific to the CMI Plan will be deemed to be a condition of this permit.

3. Groundwater Monitoring and Remediation

Where required pursuant to Conditions IX.B.1., IX.C. and IX.F. of this permit, the Permittee shall comply with the general groundwater monitoring requirements of this permit.

4. Land Use Controls

Where required pursuant to Conditions XI.B.1. and XI.C. of this permit, the Permittee shall establish appropriate land use controls to achieve protection of human health and the environment. The Permittee shall comply with Conditions XI.B.5. and XI.B.6. of this permit when implementing corrective measures requiring land use controls. Where the owner of such property will not allow an environmental covenant to be imposed, the Permittee shall notify the Department within 14 calendar days of receipt of written notification by the property owner. In such cases, the Department may allow the Permittee to propose an alternate area-specific land use control, subject to the Department's review and approval.

## 5. Survey Plat

For corrective measures where residual concentrations of contaminants will remain in-place at levels greater than those appropriate for unrestricted land use, or for corrective measures that rely on land use controls, the Permittee must:

- a. Within 90 calendar days following the effective date of a permit modification addressing remedy selection, submit to the local zoning authority, or the authority with jurisdiction over local land use, and to the Department, a survey plat indicating the location and dimensions of the SWMUs, AOCs, and capped or partially remediated areas with respect to permanently surveyed benchmarks, the locations of sampling points, and the concentrations of hazardous constituents detected. This plat must be prepared and certified by a professional land surveyor registered in the State of Alabama. The plat must be filed with the local zoning authority or the authority with jurisdiction over local land use and must contain a note, prominently displayed, which states the Permittee's obligation to limit the property to the specified restricted uses.
- b. Maintain the survey plat as described in Condition XI.B.5.a. of this permit until the Permittee has demonstrated, to the satisfaction of the Department, that the levels of hazardous constituents in all contaminated media are within limits appropriate for unrestricted land uses.

## 6. Environmental Covenant

No later than the submission of the survey plat required in Condition XI.B.5., the Permittee must:

- a. Record in the probate judges office of the county in which the property is located or portion thereof an environmental covenant in accordance with ADEM Admin. Code Rule 335-5 that will in perpetuity notify any potential purchaser of the property that:
  - i. The land is contaminated with hazardous constituents in concentrations that exceed unrestricted use standards;
  - ii. The use of the property is restricted by this permit for certain residential, municipal, or industrial purposes and may lead to an increased risk of exposure to hazardous constituents depending upon the activities initiated at the site. Such activities may yield an increased level of human health risk to the owner;
  - iii. The potential purchaser or entity that desires to work in the contaminated area should notify the Permittee before mobilizing to the area covered by the land use control.
- b. Submit to the Department a certification, signed by the Permittee in accordance with Permit Condition I.C.11. that the environmental covenant specified in this part has been performed. This certification must include a copy of the document in which the notation has been placed.

- c. Maintain the environmental covenant described in Permit Condition XI.B.6. until the Permittee has demonstrated, to the satisfaction of the Department, that the levels of hazardous constituents in all contaminated media are within limits appropriate for unrestricted land uses.
- d. Submit fees in accordance with ADEM Admin. Code R. 335-5-1-.06 to provide the Department with the funds required to implement the provisions of the Alabama Uniform Environmental Covenants Act.

7. Security

Security measures, where required by Conditions XI.B.1. and XI.C., of this permit will be conducted in accordance with ADEM Admin. Code R. 335-14-5-.02(5)(b)2.(ii) and as prescribed in the approved CMI Plan.

8. Inspection

Where corrective measures addressed in Conditions XI.B.1. include provisions to cap in place or partially remediate properties or land areas, whether owned or not owned by the Permittee, the Permittee shall specify inspection protocols on a scheduled basis to ensure continued integrity of the remedy and to ensure that land use remains appropriately restricted per the environmental covenant established pursuant to Permit Condition XI.B.6. Inspection provisions shall be as prescribed in the approved CMI Plan.

**XI.C. AREA SPECIFIC CONDITIONS [RESERVED]**

**XI.D. CORRECTIVE MEASURES IMPLEMENTATION (CMI) REPORTS**

1. CMI Progress Reports

If the time required to complete implementation of a specific set of corrective measures, as described in the Department-approved CMI Plan, is greater than 180 calendar days, the Permittee shall provide ADEM with progress reports according to the approved schedule in the CMI Plan. The progress reports shall, at a minimum, contain the following information:

- a. A description of the portion of CMI completed;
- b. Summaries of and deviations from the approved CMI during the reporting period;
- c. Summaries of current and potential problems, including recommended solutions and alternatives as well as corrective actions undertaken;
- d. Any monitoring data (soil, air, dust, water) collected for any reason during the construction period for the purposes of monitoring potential for human and ecological exposure; and
- e. Projected work for the next period and impacts to the approved schedule.

## 2. Final CMI Reports

Upon completion of construction of corrective measures systems, implementation of land use controls, interim removal actions, or other short-term activities required by this permit and/or the approved CMI Plan, the Permittee shall submit to the Department a Final CMI Report containing, at a minimum, the following:

- a. A description of activities completed;
- b. For cap and cover remedies, as-built construction drawings presenting the final in-place three-dimensional location of contaminated material. A plan view of the remediated areas shall be presented in addition to a cross section of the in-place capped areas;
- c. Hazardous waste manifests indicating the handling of any excavated material that has been shipped off-site to a Department approved, certified landfill;
- d. For remedies involving land use controls, a copy of the survey plat and environmental covenant required by Condition XI.B. of this permit;
- e. Monitoring data (soil, air, dust, water) collected for any reason during the construction period for the purposes of monitoring potential for human and ecological exposure; and
- f. Certification, prepared in accordance with ADEM Admin. Code Rule 335-14-8-02(2)(d) by the Permittee and an independent professional engineer registered in the State of Alabama, that the corrective measures implementation phase (*i.e.*, construction) required by this permit is complete and that the approved system and/or facilities are ready for operation in accordance with the intended design (*i.e.*, CMI Plan).

## 3. Corrective Measures (CM) Effectiveness Reports

- a. For corrective measures that have been fully implemented and where the corrective measures system must operate for a period of time to achieve cleanup goals or levels, the Permittee shall submit CM Effectiveness Reports annually unless otherwise approved by the Department, beginning 180 days following the Department's approval of the Final CMI Report. The CM Effectiveness Reports shall include, at a minimum the following:
  - i. A detailed narrative presenting an evaluation of the effectiveness of the selected remedy;
  - ii. Summaries of compliance with and progress toward achieving cleanup goals;
  - iii. Any significant revisions, adjustments, or proposed modifications to the selected remedy;

- iv. Tabulated environmental sampling and monitoring data including, but not limited to, groundwater quality, elevation data, and a graphical representation of all constituents detected during each sampling event from recovery wells, monitoring wells, drinking water wells, and other locations;
  - v. Chain of custody, field reports, and laboratory data sheets to include the date of collection, the date the sample was extracted, and the date of sample analysis for samples collected during the reporting period;
  - vi. Any monitoring data (soil, air, dust, water) collected for any reason during the post-construction period for the purposes of monitoring potential for human and ecological exposure;
  - vii. Isoconcentration maps depicting the distribution of parameters for each sampling event;
  - viii. Time versus concentration plots for each monitoring parameter for each recovery well and a representative number of effectiveness wells;
  - ix. Tabulated volumetric data on groundwater pumped and pumping rates (monthly and cumulative) for each recovery well;
  - x. Records of any groundwater recovery system operation time, including shutdown periods, not including any minor (less than 24 hours) shutdowns for repairs, maintenance, etc.;
  - xi. Potentiometric surface maps;
  - xii. Description of land use during the reporting period at the designated area requiring corrective measures; and
  - xiii. Findings of the Permittee's investigation into the continued effectiveness of land use controls per Condition XI.C.
- b. If at any time the Permittee determines that any remedy selection specified in Condition XI.B or XI.C. of this permit no longer satisfies the applicable requirements of ADEM Admin. Code R. 335-14-5-.06(12) or this permit for releases of hazardous waste or hazardous constituents originating from SWMUs or AOCs, the Permittee must, within 90 calendar days, submit an application for a permit modification, pursuant to Permit Condition I.I, to make any appropriate changes to the CMI Plan.
- c. The application for changes in the CMI Plan, including changes in inspection and monitoring provisions of the CMI Plan, shall be submitted as an application for a permit modification pursuant to the requirements of ADEM Admin. Code R. 335-14-8-.04.

4. Final Report of Corrective Measures

Within 90 calendar days following attainment of cleanup levels or goals as outlined in this Permit and the approved CMI Plan, the Permittee shall submit to the Department a Final Report of Corrective Measures (FRCM). The FRCM shall contain a certification by the Permittee and an Alabama-registered independent professional engineer that all remedial measures required by this permit and the approved CMI Plan have been completed. The FRCM shall outline any procedures and schedules for dismantling of corrective measures systems, groundwater monitoring or recovery systems, removal of land use controls, and any other remedial systems or controls required by this permit or the approved CMI Plan.

**PART XII****SUMMARY OF DEADLINES**

The summary information provided herein is intended only as a guide to the requirements of this permit. It is not intended to be all inclusive, nor is it intended to be used as a substitute for the full text of this permit.

| <b><u>PERMIT<br/>CONDITION</u></b> | <b><u>ITEM</u></b>                                                                                                                             | <b><u>DUE DATE</u></b>                                                                                                                                                                                                                                                                                                                                                                    |
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| I.C.2.a.                           | Reapply for a renewal                                                                                                                          | 180 days before the expiration of the current permit.                                                                                                                                                                                                                                                                                                                                     |
| I.C.12.a.                          | Give notice to the Department of any planned physical alterations or additions to the permitted facility and any solid waste management units. | As soon as possible                                                                                                                                                                                                                                                                                                                                                                       |
| I.C.12.f.                          | Report any noncompliance with this permit that may endanger human health or the environment.                                                   | Orally within 24 hours from the time the Permittee becomes aware of the circumstances. Written submission shall also be provided within 5 calendar days of the time that the Permittee becomes aware of the circumstances                                                                                                                                                                 |
| I.F.                               | Waste Minimization Certification                                                                                                               | Annually                                                                                                                                                                                                                                                                                                                                                                                  |
| I.G.                               | Update cost estimates                                                                                                                          | No later than 30 calendar days after the Department has approved a modification to the Closure Plan, Post-Closure Plan, or Corrective Action Plan, or any other plan required or referenced by this permit, if the change in the plan results in an increase in the amount of the cost estimate and annually as required by ADEM Admin. Code Rule 335-14-5-.08(3)(b), (5)(b), and (10)(b) |
| I.I.                               | Submit a written request for a permit modification pursuant to the requirements of ADEM Admin. Code Rule 335-14-8-.04(2).                      | At least 60 calendar days prior to a proposed change in facility design or operation.                                                                                                                                                                                                                                                                                                     |
| VIII.B.7.a.                        | Record leachate levels in T-19, T-21 <u>et seq.</u> sumps.                                                                                     | Monthly.                                                                                                                                                                                                                                                                                                                                                                                  |
| VIII.B.7.d.                        | Record amount of leachate removed from T-19, T-21 <u>et seq.</u> sumps.                                                                        | Monthly, unless other schedules from Condition VIII.B.7.d. apply.                                                                                                                                                                                                                                                                                                                         |
| VIII.B.8.a.                        | Notify Department in writing of action leakage rate (ALR) exceedance.                                                                          | Within seven days of determination of ALR exceedance.                                                                                                                                                                                                                                                                                                                                     |
| VIII.B.8.b.                        | Submit preliminary ALR assessment.                                                                                                             | Within fourteen days of determination of ALR exceedance.                                                                                                                                                                                                                                                                                                                                  |
| VIII.B.8.f.                        | Submit report of ALR assessment and remediation activities.                                                                                    | Within thirty days after notification of ALR exceedance, and monthly thereafter.                                                                                                                                                                                                                                                                                                          |
| VIII.B.9.                          | Measure and record depth of leachate in T-8 through T-18 and T-20 sumps.                                                                       | Semiannually, beginning within 120 days after the effective date of this permit.                                                                                                                                                                                                                                                                                                          |
| VIII.B.11.                         | Submit revised leachate removal evaluation report for T-8 through T-18 and T-20.                                                               | Within 180 days after the effective date of this permit.                                                                                                                                                                                                                                                                                                                                  |

| <u>PERMIT<br/>CONDITION</u> | <u>ITEM</u>                                                                        | <u>DUE DATE</u>                                                                                                                                                                                                                                                                                                                                   |
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| VIII.B.13.                  | Submit leachate and ALR reports.                                                   | Within 60 days after the first anniversary of the effective date of this permit, and annually thereafter.                                                                                                                                                                                                                                         |
| VIII.C.2.                   | Inspect closed unit(s).                                                            | Weekly, after storms, and in accordance with the inspection schedule.                                                                                                                                                                                                                                                                             |
| VIII.D.1.                   | File hazardous waste disposal records with local zoning and/or land use authority. | Within 60 days of certification of closure of each hazardous waste management unit.                                                                                                                                                                                                                                                               |
| VIII.D.2.                   | Record notation on deed to property.                                               | Within 60 days of certification of closure of the first hazardous waste management unit <b>and</b> within 60 days after certification of closure of the last hazardous waste management unit.                                                                                                                                                     |
| VIII.D.4.                   | Submit certification of completion of post-closure care.                           | Within 60 days after completion of post-closure care period.                                                                                                                                                                                                                                                                                      |
| IX.B.1.a.iii.               | Notification of damaged groundwater monitoring wells.                              | Immediately in writing. The well must be repaired within 30 days of damage, and repair report must be submitted within 30 days of repair.                                                                                                                                                                                                         |
| IX.B.1.d.                   | Install additional groundwater monitoring wells.                                   | As necessary to assess changes in the rate and extent of any plume of contamination, or as otherwise deemed necessary. Note: a permit modification request must be submitted at least 90 days prior to installation of additional groundwater monitoring well(s). Submit well installation report within 30 days after installation is completed. |
| IX.B.1.g.                   | Install new Selma Chalk wells adjacent to new landfill cells of Trench 22.         | Prior to commencement of disposal operations within each new landfill cell. Submit plan at least 30 days prior to installation of each well. Submit report at least 45 days prior to commencement of disposal operations in each cell.                                                                                                            |
| IX.B.1.h.                   | Review well construction schematics.                                               | Within 90 days after the effective date of this permit for all existing wells. Submit report within 120 days after the effective date of this permit. Review and report updates periodically as needed.                                                                                                                                           |
| IX.B.1.i.                   | Prepare and submit fracture map and rose diagram.                                  | Begin preparation within 45 days after the effective date of this permit. Submit completed fracture map and rose diagram to the Department within 180 days of the effective date of this permit. Update fracture map and rose diagram annually as part of annual groundwater monitoring report.                                                   |
| IX.B.2.a.                   | Determine groundwater surface elevation.                                           | At least quarterly and each time a well is sampled.                                                                                                                                                                                                                                                                                               |

| <b><u>PERMIT<br/>CONDITION</u></b> | <b><u>ITEM</u></b>                                                                            | <b><u>DUE DATE</u></b>                                                                                                                                                             |
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| IX.B.2.b.                          | Determine groundwater flow rate and direction.                                                | Annually.                                                                                                                                                                          |
| IX.B.6.b.                          | Annual groundwater monitoring report.                                                         | Within 60 days of the first sampling event and annually thereafter.                                                                                                                |
| IX.B.6.c.                          | Quarterly progress reports.                                                                   | Within 90 days after the effective date of this permit and quarterly thereafter. See permit condition for start/stop/resume provisions.                                            |
| IX.C.1.                            | Commence detection monitoring.                                                                | No later than 180 days after the effective date of this permit.                                                                                                                    |
| IX.C.1.a. and c.                   | Semi-annual sampling for constituents on Table IX.2.                                          | Within 180 days after the effective date of this permit and semi-annually thereafter.                                                                                              |
| IX.C.1.b.                          | Semi-annual sampling for field parameters on Table IX.3.                                      | Within 180 days of effective date of this permit and semi-annually thereafter.                                                                                                     |
| IX.C.2.b.                          | Implement groundwater quality assessment plan from Section E-4e(1) of the permit application. | Upon determination that a constituent(s) exceeds MDL. See Condition IX.C.2.b.i <u>et seq.</u> for additional requirements.                                                         |
| IX.C.2.c.                          | Implement groundwater quality assessment plan from Section E-4e(2) of the permit application. | Upon determination that a constituent(s) exceeds PQL. See Condition IX.C.2.c.i. <u>et seq.</u> for additional requirements.                                                        |
| IX.C.2.c.vi.                       | Submit permit modification request to establish/implement compliance monitoring program.      | Within 30 days of completing contaminant migration study required by Conditions IX.C.2.c.iv. and IX.C.2.c.v.                                                                       |
| IX.C.2.c.ix.                       | Submit permit modification request to establish/implement corrective action program.          | Within 90 days of confirmation that MCL/ACL has been exceeded.                                                                                                                     |
| IX.C.2.d. and IX.G.1.              | Submit permit modification request to upgrade groundwater monitoring program.                 | Within 90 days of determination that the current monitoring program no longer satisfies the requirements of Condition IX.C. of this permit or ADEM Admin. Code R. 335-14-5-.06(9). |
| IX.F.1.                            | Commence Selma Chalk monitoring.                                                              | No later than 120 days after the effective date of this permit.                                                                                                                    |
| IX.F.1.a. and c.                   | Semi-annual sampling for constituents on Table IX.5.                                          | Within 120 days after the effective date of this permit and semi-annually thereafter.                                                                                              |
| IX.F.1.b.                          | Semi-annual sampling for constituents on Table IX.3.                                          | Within 120 days after the effective date of this permit and semi-annually thereafter.                                                                                              |
| IX.F.2.a.i.                        | Implement Condition IX.F.2.b. procedures.                                                     | Upon determination that constituents exceed MDL, but not MCL/ACL.                                                                                                                  |
| IX.F.2.a.ii.                       | Implement Condition IX.F.2.c. procedures.                                                     | Upon determination that constituents exceed MCL/ACL, but no Condition IX.F.2.a.iii. criteria is met.                                                                               |
| IX.F.2.a.iii.                      | Implement Condition IX.F.2.d. procedures.                                                     | Upon determination that constituents exceed MCL/ACL <b>and</b> at least one Condition IX.F.2.a.iii. criteria is met.                                                               |

| <b><u>PERMIT<br/>CONDITION</u></b> | <b><u>ITEM</u></b>                                                                                                                                                                                                                                        | <b><u>DUE DATE</u></b>                                                                                                                                                                                                                                                                                                                                                                                                           |
|------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| IX.F.2.e. and IX.G.1.              | Submit permit modification request to upgrade Selma Chalk monitoring program.                                                                                                                                                                             | Within 90 days of determination that the current monitoring program no longer satisfies the requirements of Condition IX.F. of this permit or ADEM Admin. Code R. 335-14-5-.06(8).                                                                                                                                                                                                                                               |
| X.B.1.                             | Notify the Department, in writing, of the discovery of any additional AOCs.                                                                                                                                                                               | Within 15 calendar days of discovery.                                                                                                                                                                                                                                                                                                                                                                                            |
| X.B.2.                             | Notify the Department, in writing, of the discovery of any additional SWMUs.                                                                                                                                                                              | Within 15 calendar days of discovery                                                                                                                                                                                                                                                                                                                                                                                             |
| X.B.3.                             | Submit a SWMU Assessment Report (SAR) for each SWMU identified under X.B.2.                                                                                                                                                                               | Within 90 calendar days of notification.                                                                                                                                                                                                                                                                                                                                                                                         |
| X.C.1.                             | Notify the Department, in writing, of any newly discovered release(s) of hazardous waste or hazardous constituents from SWMUs or AOCs discovered during the course of groundwater monitoring, field investigations, environmental audits, or other means. | Within 15 calendar days of discovery.                                                                                                                                                                                                                                                                                                                                                                                            |
| X.D.7.                             | Submit monthly RFI progress reports.                                                                                                                                                                                                                      | Monthly basis beginning in the second month following the initiation of the RFI.                                                                                                                                                                                                                                                                                                                                                 |
| X.D.8.                             | Submit RFI Report                                                                                                                                                                                                                                         | Within 60 days from the completion of investigation activities.                                                                                                                                                                                                                                                                                                                                                                  |
| X.E.2.                             | Submit CMI Plan                                                                                                                                                                                                                                           | Within 120 days following the Permittee's submittal of the RFI Report indicating that hazardous constituents have come to be located at any area of the Permittee's facility, or beyond the facility, at concentrations exceeding those appropriate for the protection of human health and the environment, or within 120 days following notification from the Department that a CMI Plan is required, whichever occurs earlier. |
| X.E.4.                             | Demonstrate financial assurance for completing the approved remedy.                                                                                                                                                                                       | Within 120 calendar days after this Permit has been modified in accordance with Permit Condition X.E.2.                                                                                                                                                                                                                                                                                                                          |
| X.F.3.                             | Submit IM Report                                                                                                                                                                                                                                          | Within 90 calendar days of completion of IM.                                                                                                                                                                                                                                                                                                                                                                                     |