

**STATE OF MISSISSIPPI  
HAZARDOUS WASTE MANAGEMENT  
PERMIT**

**THIS CERTIFIES THAT**

**Timco, Inc.  
941 South Magnolia Drive  
Wiggins, Mississippi  
Stone County  
HW9215501  
(MSD 052 056 637)**

is hereby authorized to conduct post closure care and corrective action for groundwater contamination for their closed surface impoundments at their site near Wiggins, Mississippi.

This permit is issued under the authority of the Mississippi Solid Wastes Disposal Law, and particularly Section 17-17-27 thereof, and rules adopted and promulgated thereunder, all of which authorize the Department of Environmental Quality to enforce all applicable requirements, under the Mississippi Hazardous Waste Management Regulations, and associated conditions included therein.

**Permit Issued:** SEP 30 2011

**MISSISSIPPI ENVIRONMENTAL QUALITY PERMIT BOARD**

  
\_\_\_\_\_  
**AUTHORIZED SIGNATURE**

**MISSISSIPPI DEPARTMENT OF ENVIRONMENTAL QUALITY**

**Permit No.: HW9215501**

**Expires:** AUG 31 2021

## TABLE OF CONTENTS

MODULE 1 – GENERAL PERMIT CONDITIONS.....	1
I.A.    EFFECT OF PERMIT.....	1
I.B.    PERMIT ACTIONS .....	1
I.C.    SEVERABILITY .....	2
I.D.    DEFINITIONS .....	2
I.E.    DUTIES AND REQUIREMENTS .....	2
I.F.    SIGNATORY REQUIREMENT .....	7
I.G.    REPORTS, NOTIFICATIONS, AND SUBMISSIONS TO THE EXECUTIVE DIRECTOR.....	7
I.H.    CONFIDENTIAL INFORMATION.....	7
MODULE II – GENERAL FACILITY CONDITIONS .....	8
II.A.    FACILITY DESCRIPTION.....	8
II.B.    DESIGN AND OPERATION OF FACILITY .....	8
II.C.    REQUIRED NOTICES .....	8
II.D.    SECURITY .....	8
II.E.    GENERAL INSPECTION REQUIREMENTS .....	9
II.F.    LOCATION STANDARD.....	9
II.G.    GENERAL POST-CLOSURE REQUIREMENTS .....	9
II.H.    COST ESTIMATE FOR POST-CLOSURE CARE .....	10
II.I.    FINANCIAL ASSURANCE FOR POST-CLOSURE CARE AND CORRECTIVE ACTION .....	10
II.J.    INCAPACITY OF OWNERS OR OPERATORS, GUARANTORS, OR FINANCIAL INSTITUTIONS.....	10
II.K.    OPERATING RECORD .....	11
II.L.    SPECIAL CONDITIONS .....	11
MODULE III – POST-CLOSURE CARE .....	12
III.A.    APPLICABILITY.....	12
III.B.    POST-CLOSURE CARE AND USE OF PROPERTY .....	12
III.C.    POST-CLOSURE INSPECTIONS .....	13
III.D.    POST-CLOSURE NOTICES.....	13
III.E.    CERTIFICATION OF COMPLETION OF POST-CLOSURE CAR .....	13
III.F.    FINANCIAL ASSURANCE.....	13
III.G.    RETENTION OF POST-CLOSURE PLAN.....	14
III.H.    POST-CLOSURE PERMIT MODIFICATIONS .....	14
MODULE IV – GROUNDWATER PROTECTION .....	15
IV.A.    APPLICABILITY .....	15
IV.B.    GROUNDWATER MONITORING PROGRAM .....	15
IV.C.    GROUNDWATER PROTECTION STANDARDS.....	15
IV.D.    HAZARDOUS CONSTITUENTS AND CONCENTRATION LIMITS.....	15
IV.E.    POINT OF COMPLIANCE .....	16
IV.F.    COMPLIANCE PERIOD.....	17
IV.G.    WELL LOCATION, INSTALLATION AND CONSTRUCTION.....	17
IV.H.    GROUNDWATER MONITORING REQUIREMENTS .....	18
IV.I.    SAMPLING AND ANALYSIS PROCEDURES .....	20

IV.J. ELEVATION OF THE GROUNDWATER SURFACE .....	20
IV.K. RECORDKEEPING AND REPORTING.....	21
IV.L. REQUEST FOR PERMIT MODIFICATION .....	25
MODULE V – CORRECTIVE ACTION PROGRAM FOR REGULATED UNITS ..	26
V.A. APPLICABILITY .....	26
V.B. CORRECTIVE ACTION PLAN .....	26
V.C. CORRECTIVE ACTION PERIOD .....	26
V.D. LIST OF HAZARDOUS CONSTITUENTS .....	27
V.E. CONCENTRATION LIMITS.....	27
V.F. CORRECTIVE ACTION IMPLEMENTATION.....	27
V.G. CORRECTION ACTION TO PROPERTY BOUNDARY .....	27
V.H. REPORTS .....	27
V.I. MODIFICATIONS .....	28
V.J. SPECIAL CONDITIONS .....	28
MODULE VI – LAND DISPOSAL RESTRICTIONS.....	29
VI.A. GENERAL RESTRICTIONS .....	29
VI.B. LAND DISPOSAL PROHIBITIONS AND TREATMENT STANDARDS	29
MODULE VII – ORGANIC AIR EMISSIONS REQUIREMENTS FOR PROCESS	
VENTS AND EQUIPMENT LEAKS .....	30
VII.A. GENERAL INTRODUCTION .....	30
VII.B. ORGANIC AIR EMISSION STANDARDS .....	30
MODULE VIII – WASTE MINIMIZATION .....	31
VIII.A. APPLICABILITY .....	31
VIII.B. WASTE MINIMIZATION CERTIFICATION OBJECTIVES.....	31
VIII.C. RECORDKEEPING AND REPORTING.....	33
MODULE IX - PHASE II RCRA ORGANIC AIR EMISSION REQUIREMENTS..	34
IX.A. GENERAL INTRODUCTION .....	34
IX.B. ORGANIC AIR EM ISSION STANDARDS .....	34

**LIST OF ATTACHMENTS**

<b>Attachment A</b>	<b>GENERAL FACILITY DESCRIPTION</b>
<b>Attachment B</b>	<b>POST-CLOSURE PLAN</b>
<b>Attachment C</b>	<b>INSPECTION AND SECURITY PLAN</b>
<b>Attachment D</b>	<b>HAZARDOUS WASTE PERMIT APPLICATION PART A</b>
<b>Attachment E</b>	<b>RESERVED</b>
<b>Attachment F</b>	<b>RESERVED</b>
<b>Attachment G</b>	<b>FIGURES</b>
<b>Attachment H</b>	<b>CORRECTIVE ACTION PLAN</b>
<b>Attachment I</b>	<b>GROUNDWATER SAMPLING AND ANALYSIS PLAN</b>

## MODULE 1 – GENERAL PERMIT CONDITIONS

### I.A. EFFECT OF PERMIT

The Permittee is authorized to monitor groundwater, to conduct post-closure care of the closed cooling water pond and the closed treated sludge impoundment and perform corrective action to remediate groundwater contamination from the closed treated sludge impoundment, in accordance with the conditions of this permit. Subject to MHWMR 270.4, compliance with this permit constitutes compliance, for purposes of enforcement, with Subtitle C of the Resource Conservation and Recovery Act (RCRA). Issuance of this permit does not convey property rights of any sort or any exclusive privilege; nor does it authorize any injury to persons or property, and invasion of other private rights, or any infringement of state or local law or regulations or preclude compliance with any other Federal, State, and/or local laws. Compliance with the terms of this permit does not constitute a defense to any order issued or any action brought under Section 3008(a), Section 3008 (h), Section 3013, of Section 7003 of RCRA; Sections 106(a), 104 or 107 of the Comprehensive Environmental Response, Compensation, and Liability Act of 1980 (42 U.S.C. 9601 et seq., commonly known as CERCLA) or any other law providing for protection of public health or the environment.

### I.B. PERMIT ACTIONS

#### I.B.1 Permit Modification, Revocation and Reissuance, and Termination

This permit may be modified, revoked and reissued, or terminated for cause as specified in MHWMR Part 270.41, 270.42, 270.43, and 270.50(d). 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 the applicability or enforceability of any permit conditions.

#### I.B.2 Permit Renewal

This permit may be renewed as specified in MHWMR 270.30(b) and Permit Condition I.E.2. Review of any application for a permit renewal shall consider improvements in the state of control and measurement technology, as well as changes in applicable regulations.

I.C. SEVERABILITY

The provisions of this permit are severable, and if any provisions 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.D. DEFINITIONS

For purposes of this permit, terms used herein shall have the same meaning as those in MHWMR Parts 124, 260, 264, 268 and 270, unless this permit specifically provides otherwise; where terms are not defined in the regulations or the permit, the meaning associated with such terms shall be defined by a standard dictionary or the generally accepted scientific or industrial meaning to the term. "Executive Director" means the Executive Director of MDEQ, or his designated or authorized representative.

I.E. DUTIES AND REQUIREMENTS

I.E.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 RCRA and is grounds for enforcement action; permit termination, revocation and reissuance, or modification; or denial of a permit renewal application.

I.E.2. Duty to Reapply

If the Permittee wishes to continue an activity allowed by this permit after the expiration date of this permit, the Permittee shall submit a complete application for a new permit at least 180 days prior to permit expiration.

I.E.3. Permit Expiration

Pursuant to MHWMR Part 270.50, this permit shall be effective for a fixed term not to exceed ten (10) years. This permit and all conditions herein will remain in effect beyond the permit's expiration date, if the Permittee has submitted a timely, complete application and, through no fault of the Permittee, the Executive Director has not issued a new permit, as set forth in MHWMR 270.51.

I.E.4. 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.

I.E.5. Duty to Mitigate

In the event of noncompliance with the permit, the Permittee shall take all reasonable steps to minimize releases to the environment and shall carry out such measures as are reasonable to prevent significant adverse impacts on human health or the environment.

I.E.6. Proper Operation and Maintenance

The Permittee shall at all times properly operate and maintain all facilities and systems of treatment and control (and related appurtenances) which are installed or used by the Permittee to achieve compliance with the conditions of this permit. Proper operation and maintenance includes effective performance, adequate funding, adequate staffing and training, and adequate laboratory and process controls, including appropriate quality assurance/quality control procedures. This provision requires the operation of backup or auxiliary facilities or similar systems only when necessary to achieve compliance with the conditions of the permit.

I.E.7. Duty to Provide Information

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

I.E.8. Inspection and Entry

Pursuant to MHWMR 270.30(i), the Permittee shall allow the Executive Director, or an authorized representative, upon the presentation of credentials and other documents, as may be required by law, to:

- I.E.8.a. Enter, at reasonable times, upon the Permittee's premises where a regulated activity is located or conducted, or where records must be kept under the conditions of this permit;
- I.E.8.b. Have access to and copy, at reasonable times, any records that must be kept under the conditions of this permit;

- I.E.8.c. Inspect at reasonable times any facility, equipment (including monitoring and control equipment), practices, or operations regulated or required under this permit; and
- I.E.8.d. Sample or monitor, at reasonable times, for the purposes of assuring permit compliance or as otherwise authorized by RCRA, any substances or parameters at any location.

I.E.9. Monitoring and Records

The Executive Director may require such testing by the Permittee and may make such modifications to this permit deemed necessary to ensure implementation of new regulations or requirements, or to ensure protection of human health and the environment.

- I.E.9.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 wastes to be analyzed must be the appropriate method from Appendix I of MHWMR Part 261, the EPA Region 4 Field Branches Quality System and Technical Procedures (SOP) (most recent version), or an equivalent method approved by the Executive Director. Laboratory methods must be those specified in Test Methods for Evaluating Solid Waste: Physical/Chemical Methods SW-846, Standard Methods for the Examination of Water and Wastewater, or an equivalent method approved by the Executive Director and specified herein.
- I.E.9.b. The Permittee shall retain 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 and records required by this permit, the certification required by MHWMR 264.73(b)(9), and records of all data used to complete the application for this permit for a period of at least 3 years from the date of the sample, measurement, report, record, certification, or application. This period may be extended by the Executive Director at any time and is automatically extended during the course of any unresolved enforcement action regarding this facility. The Permittee shall also maintain records for all groundwater monitoring wells and associated groundwater surface elevations for the duration of the post-closure care period. All records required by this condition shall be maintained at the facility or at the office of the facility contact and shall be made available upon request.



- I.E.9.c. Records of monitoring information shall specify:
- i. The date(s), exact place, and time(s) of sampling or measurements;
  - ii. The individual(s) who performed the sampling or measurements;
  - iii. The date(s) the analyses were performed;
  - iv. The individual(s) who performed the analyses;
  - v. The analytical techniques or methods used, including any method detection limits for said technique; and
  - vi. The results of such analyses.

I.E.10. Reporting Planned Changes

The Permittee shall give notice to the Executive Director as soon as possible of any planned physical alterations or additions to the permitted facility.

I.E.11. Anticipated Noncompliance

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

I.E.12. Transfer of Permits

This permit is not transferable to any person, except after notice to the Executive Director. The Executive Director may require modification or revocation and reissuance of the permit pursuant to MHWMR 270.40. Before transferring ownership or operation of the facility, the Permittee shall notify the new owner or operator in writing of the requirements of MHWMR Parts 264 and 270 and of this permit.

I.E.13. Twenty-Four Hour Reporting

- I.E.13.a. The Permittee shall report to the Executive Director any noncompliance with the permit which may endanger health or the environment. Any such information shall be reported orally within twenty-four (24) hours from the time the Permittee becomes aware of the circumstances. This report shall include the following:

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

I.E.13.b. The description of the occurrence and its cause shall include:

- i. Name, address, and telephone number of the owner or operator;
- ii. Name, address, and telephone number of the facility;
- iii. Date, time, and type of incident;
- iv. Name and quantity of materials 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 incident.

I.E.13.c. A written submission shall also be provided within five (5) days of the time the Permittee becomes aware of the circumstances. The written submission shall contain a description of the noncompliance and its cause; the period(s) 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. The Executive Director may waive the five-day written notice requirement in favor of a written report within 15 days.

I.E.14. Other Noncompliance

The Permittee shall report all other instances of noncompliance not otherwise required to be reported above at the time monitoring reports are submitted. The reports shall contain the information listed in condition I.E.13. of this Permit.

I.E.15. Obligation for Corrective Action

The Permittee is required to continue this permit for any period necessary to comply with the corrective action requirements of this permit.

I.E.16. Other Information

Whenever the Permittee becomes aware that it failed to submit relevant facts in the permit application or submitted incorrect information in a permit application or any report to the Executive Director, the Permittee shall promptly submit such facts or information.

I.F. SIGNATORY REQUIREMENT

All applications, reports, or information submitted to or requested by the Executive Director shall be signed and certified in accordance with MHWMR 270.11.

I.G. REPORTS, NOTIFICATIONS, AND SUBMISSIONS TO THE EXECUTIVE DIRECTOR

All reports, notifications, or other submissions which are required by this permit to be sent to or given to the Executive Director should be sent by certified mail or given to:

Mississippi Department of Environmental Quality  
Office of Pollution Control  
P.O. Box 2261  
Jackson, MS 39225

I.H. CONFIDENTIAL INFORMATION

In accordance with MHWMR Part 270.12, the Permittee may claim confidential any information required to be submitted by this permit.

## **MODULE II – GENERAL FACILITY CONDITIONS**

### **II.A. FACILITY DESCRIPTION**

This permit is issued to Timco, Inc. for their Wiggins, Mississippi Facility [MSD 052 056 637] as described in the permit renewal application submitted on December 1, 2009, including all subsequently submitted supplementary information and modifications; and hereinafter referred to as “the application.” This permit authorizes the Permittee to conduct post-closure care of two closed surface impoundments (the closed cooling water pond and closed treated sludge impoundment); and to perform corrective action for the contaminated groundwater beneath the closed treated sludge impoundment.

### **II.B. DESIGN AND OPERATION OF FACILITY**

The Permittee shall maintain and operate the facility to minimize the possibility of fire, explosion, or any unplanned sudden or non-sudden release of hazardous waste or hazardous waste constituents to air, soil, or surface water which could threaten human health or the environment, as required by MHWMR 264.31.

### **II.C. REQUIRED NOTICES**

#### **II.C.1. Hazardous Waste Imports**

The Permittee shall not receive hazardous waste from a foreign source.

#### **II.C.2. Hazardous Waste from Off-Site Sources**

The Permittee shall not receive hazardous waste from an off-site source.

#### **II.C.3. Transfer of Permit**

Before transferring ownership or operation of the facility, the owner or operator must notify the new owner or operator in writing of the requirements of MHWMR Parts 264 and 270.

### **II.D. SECURITY**

The Permittee shall comply with the security provisions of MHWMR Section 264.14(b)(2) and (c) as described in Attachment B.

II.E. GENERAL INSPECTION REQUIREMENTS

The Permittee shall comply with the inspection requirements of MHWMR Section 264.15 as described in Attachment C and the Post-Closure Plan found in Attachment B. The Permittee shall remedy any deterioration or malfunction discovered by an inspection as required by MHWMR 264.15(c). Records of inspections shall be kept as required by MHWMR 264.15(d).

II.F. LOCATION STANDARD

The facility is not located in an area described by MHWMR 264.18(a). None of the regulated units is located within a 100-year floodplain.

II.G. GENERAL POST-CLOSURE REQUIREMENTS

II.G.1. Post-Closure Care Period

The Permittee shall conduct post-closure care for the closed surface impoundments for 30 years following the date of completion of closure,. Post-closure care of the units shall be in accordance with MHWMR 264.117 and the Post-Closure Plan required by MHWMR 264.118.

II.G.2. Amendment to Post-Closure Plan

The Permittee shall request a permit modification and amend the Post-Closure Plan, whenever necessary, in accordance with MHWMR Section 264.118(d).

II.G.3. Post-Closure Notices

- II.G.3.a. The Permittee has submitted records of the type, location, and quantity of hazardous waste disposed within each cell or disposal unit, in accordance with MHWMR 264.119(a).
- II.G.3.b. 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 Permittee performed the following:
- i. Recorded a notation on the deed to the facility property, in accordance with MHWMR 264.119(b)(1).
  - ii. Submitted a certification that the notation required by MHWMR 264.119(b)(1) has been recorded, in accordance with MHWMR 264.119(b)(2).

II.G.3.c. The Permittee shall request and obtain a permit modification prior to the post-closure removal of hazardous wastes, hazardous waste residues, liners, or contaminated soils in accordance with MHWMR 264.119(c).

II.G.4. Certification of Completion of Post-Closure Care

The Permittee shall certify that post-closure care was performed in accordance with the specifications in the Post-Closure Plan, Permit Attachment E, as required by MHWMR 264.120.

II.H. COST ESTIMATE FOR POST-CLOSURE CARE

II.H.1. The Permittee must have a detailed written estimate of the cost of providing post-closure care of the facility, prepared in accordance with MHWMR 264.144(a).

II.H.2. The Permittee must annually adjust the post-closure care cost estimate for inflation as required by MHWMR 264.144(b).

II.H.3. The Permittee must revise the post-closure cost estimate whenever there is a change in the facility's post-closure plan as required by MHWMR Section 264.144(c).

II.H.4. The Permittee must keep the latest post-closure cost estimate, as required by MHWMR Section 264.144(d), at the facility.

II.H.5. The Permittee shall demonstrate continuous compliance with MHWMR 264.101(b) by maintaining and annually updating documentation of financial assurance for corrective action.

II.I. FINANCIAL ASSURANCE FOR POST-CLOSURE CARE AND CORRECTIVE ACTION

The Permittee shall demonstrate continuous compliance with MHWMR 264.145 and 264.101(b) by providing documentation of financial assurance for post-closure care and corrective action. Changes in financial assurance mechanisms must be approved by the Executive Director pursuant to MHWMR Section 264.145.

II.J. INCAPACITY OF OWNERS OR OPERATORS, GUARANTORS, OR FINANCIAL INSTITUTIONS

The Permittee shall comply with MHWMR 264.148 whenever necessary.

II.K OPERATING RECORD

Pursuant to MHWMR Part 264.73(a), the Permittee must keep a written operating record of post-closure care activities and those activities specified in MHWMR Part 264.73(b)(5) and (6), as well as post-closure cost estimates required by MHWMR 264.73(b)(8). These records shall be maintained at the facility and shall be made available upon request.

II.L. SPECIAL CONDITIONS

II.L.1. Where a discrepancy exists between the wording of an item in the application and this permit, the permit requirements take precedence over the application.

II.L.2 Where a discrepancy exists between the wording of an item in an attachment and wording in the permit module, the module requirements take precedence over the attachment.

## MODULE III – POST-CLOSURE CARE

### III.A. APPLICABILITY

The Permittee shall provide post-closure care for the two closed Surface Impoundments, as described in Attachment A and depicted in Figures 1-1 and 1-2 of Attachment I, in accordance with MHWMR 264.110(b).

### III.B. POST-CLOSURE CARE AND USE OF PROPERTY

III.B.1. Post-closure care for the Surface Impoundments shall extend for thirty (30) years from the certification of complete closure, except as otherwise specified herein. The post-closure care period may be shortened upon application and demonstration approved by MDEQ that the facility is secure, or may be extended by MDEQ if the Executive Director or his authorized representative finds this is necessary to protect human health and the environment. [MHWMR 264.117(a)]

III.B.2. The Permittee shall perform maintenance, monitoring, and reporting for the groundwater monitoring program in accordance with the applicable requirements of Subpart F of MHWMR Part 264 and Module IV of this permit during the post-closure period. [MHWMR 264.117(a)(1)]

III.B.3. For the Surface Impoundments, the permittee shall comply with the post-closure care requirements for surface impoundments in MHWMR Part 264, Subpart K, as follows [MHWMR 264.117(a)(1) and MHWMR 264.228(b)]:

III.B.3.a. Maintain the integrity and effectiveness of the final cover, including making repairs to the cap, as necessary, to correct the effects of settling, subsidence, erosion and other events. Vegetative growth shall not exceed two feet in height, and woody shrubs or trees shall be eliminated. Other maintenance shall take place per the requirements of the Post-Closure Plan, Permit Attachment B. [MHWMR 264.228(b)(3)];

III.B.3.b. Maintain and monitor the groundwater monitoring system and comply with all other applicable requirements of MHWMR Part 264, Subpart F [MHWMR 264.228(b)(3)];

III.B.3.c. Prevent run-on and run-off from eroding or otherwise damaging the final cover [MHWMR 264.228(B)(3)];



III.B.4. The Permittee shall maintain the security measures specified in Attachment C and shall inspect these security devices as specified in the Post-Closure Plan found in Attachment B. [MHWMR 264.117(b)]

III.B.5. The Permittee shall implement the Post-Closure Plan found in Attachment B. All post-closure care activities must be conducted in accordance with the provisions of the Post-Closure Plan. [MHWMR 264.117(d); MHWMR 264.118(b)]

III.B.6. The Permittee shall not allow any use of the two closed surface impoundments which will disturb the integrity of the final cover, liners, any components of the containment system, or the function of the facility's monitoring systems during the post-closure care period. [MHWMR 264.117(c)]

### III.C. POST-CLOSURE INSPECTIONS

The Permittee shall inspect the components, structures, and equipment at the site in accordance with the Inspection Schedule in Attachment C.

### III.D. POST-CLOSURE NOTICES

If the Permittee or any subsequent owner or operator of the land upon which the hazardous waste disposal unit is located, wishes to remove hazardous wastes and hazardous waste residues or contaminated soils, he shall request a modification to this post-closure permit in accordance with the applicable requirements in MHWMR Parts 124 and 270. The Permittee or any subsequent owner or operator of the land shall demonstrate that the removal of hazardous wastes will satisfy the criteria of MHWMR 264.117(c). [MHWMR 264.119(c)]

### III.E. CERTIFICATION OF COMPLETION OF POST-CLOSURE CARE

No later than sixty (60) days after completion of the established post-closure care period for each hazardous waste disposal unit, the Permittee shall submit to the Executive Director, 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 Permittee and an independent, professional engineer registered in the State of Mississippi. Documentation supporting the independent, professional engineer's certification must be furnished to the Executive Director upon request until the Executive Director releases the Permittee from the financial assurance requirements for post-closure care under MHWMR 264.145(i). [MHWMR 264.120]

### III.F. FINANCIAL ASSURANCE

- III.F.1. The Permittee shall maintain financial assurance during the post-closure period and comply with all applicable requirements of MHWMR 264, Subpart H. [MHWMR 264.145]
- III.F.2. The Permittee shall demonstrate to the Executive Director that the value of the financial assurance mechanism exceeds the remaining cost of post-closure care, in order for the Executive Director to approve a release of funds. [MHWMR 264.145(a)(10)]
- III.F.3. The Permittee shall submit itemized bills to the Executive Director when requesting reimbursement for post-closure care. [MHWMR 264.145(a)(11)]

### III.G. RETENTION OF POST-CLOSURE PLAN

The person designated as the facility contact in the Post-Closure Plan (Attachment B) must keep the updated Post-Closure Plan during the remainder of the post-closure period. [MHWMR 264.118(c)]

### III.H. POST-CLOSURE PERMIT MODIFICATIONS

The Permittee must submit a written request for a permit modification to authorize a change in the approved Post-Closure Plan. This request must be made in accordance with applicable requirements of MHWMR Parts 124 and 270 and must include a copy of the amended Post-Closure Plan for approval by the Executive Director. The Permittee shall request a permit modification whenever changes in operating plans or facility design affect the approved Post-Closure Plan; there is a change in the expected year of final closure; or other events occur during the active life of the facility that affect the approved Post-Closure Plan. The Permittee must submit a written request for a permit modification at least sixty (60) days prior to the proposed change in facility design or operation, or no later than sixty (60) days after an unexpected event has occurred which affects the Post-Closure Plan. The Executive Director will approve, disapprove, or modify this plan in accordance with the procedures in MHWMR Parts 124 and 270. [MHWMR 264.118(d)]

## **MODULE IV – GROUNDWATER PROTECTION**

### **IV.A. APPLICABILITY**

The conditions of this module apply to the two closed Surface Impoundments, as described in Attachment A and depicted in Figures 1-1 and 1-2 of Attachment I. The permittee shall conduct detection monitoring for the groundwater immediately downgradient of the closed cooling water pond and shall maintain the corrective action groundwater monitoring program for the closed treated sludge impoundment.

### **IV.B. GROUNDWATER MONITORING PROGRAM**

The Permittee shall conduct a corrective action groundwater monitoring for the closed treated sludge impoundment (surface impoundment) as required by MHWMR 264.91(a)(3) and detection monitoring for the closed cooling water pond (surface impoundment) as required by MHWMR 264.117(a) and 264.228(b)(2). When the concentrations of hazardous constituents in Condition IV.D. have not exceeded the groundwater protection standards under Condition IV.C. along the point of compliance or in any compliance or effectiveness monitoring wells for a period of three consecutive years, then the Permittee may petition the Executive Director for a permit modification to conduct a compliance monitoring program per MHWMR 264.99.

### **IV.C. GROUNDWATER PROTECTION STANDARDS**

The groundwater protection standards under MHWMR 264.92 shall be equal to the concentration limits under Condition IV.D. during the corrective action compliance period. These groundwater protection standards are based on the Maximum Contaminant Limits (MCLs) as established in the National Primary Drinking Water Regulations under the Safe Drinking Water Act (SWDA). In cases where MCLs have not been promulgated, the standard shall be the tapwater screening level from the “Regional Screening Levels for Chemical Contaminants at Superfund Sites”. If no such levels have been established, the Method Detection Limit (MDL) or, in the absence of MDLs, the Practical Quantitation Limits (PQL) or Limit of Quantitation (LOQ), shall be the groundwater protection standards. The Permittee may petition the Executive Director for a permit modification during the compliance period to establish additional groundwater protection standards based on alternate concentration limits (ACLs) under MHWMR 264.94(b). [MHWMR 264.100(a)]

### **IV.D. HAZARDOUS CONSTITUENTS AND CONCENTRATION LIMITS**

The following constituents are present in the groundwater beneath the closed treated sludge impoundment (surface impoundment) as specified in Attachment I.

The groundwater protection standards of Condition IV.C. shall be based on the indicated concentration limits, as required by MHWMR 264.94. The Permittee shall continue to implement a corrective action program to ensure that the hazardous constituents beneath the regulated unit are being effectively reduced to achieve compliance with the groundwater protection standards. The following hazardous constituents and their concentration limits comprise the groundwater protection standards [MHWMR 264.100(a)(1)-(2)]:

<b>Constituents</b>	<b>Concentration Limit (µg/L)<sup>1</sup></b>	<b>Basis</b>
2, 4-Dimethylphenol	730	SL <sup>2</sup>
2-Methylnaphthalene	150	SL <sup>2</sup>
Acenaphthylene	10	LOQ <sup>3</sup>
Acenaphthene	2200	SL <sup>2</sup>
Benz[a]anthracene	0.029	SL <sup>2</sup>
Benzene	5	MCL
Carbazole	10	LOQ <sup>3</sup>
Dibenzofuran	37	SL <sup>2</sup>
Ethylbenzene	700	MCL
Fluoranthene	1500	SL <sup>2</sup>
Naphthalene	0.14	SL <sup>2</sup>
p-Chloro-m-cresol (4-Chloro-3-Methylphenol)	3700	SL <sup>2</sup>
Phenanthrene	10	LOQ <sup>3</sup>
Phenol	11000	SL <sup>2</sup>
Tetrachlorophenol	11000	SL <sup>2</sup>
Toluene	1000	MCL
Xylene (total)	10000	MCL

<sup>1</sup>Per the analytical methods in Table 3 of the Groundwater Sampling and Analysis Plan found in Attachment I.

<sup>2</sup>SL = Tapwater screening level from “Regional Screening Levels for Chemical Contaminants at Superfund Sites” as of May 2010.

<sup>3</sup>The LOQ is the lower limit of quantitation from Method 8270D of EPA’s SW-846.

#### IV.E. POINT OF COMPLIANCE

The points of compliance for the closed waste management areas (the two closed surface impoundments) shall be the vertical surface located at the hydraulically downgradient limit of the waste management areas that extends down into the

uppermost aquifer underlying the waste management areas. For the closed treated sludge impoundment, the point of compliance is represented by the line connecting compliance monitoring wells MW-2A, MW-3S, and MW-4 and extending down to the uppermost aquifer. For the closed cooling water pond, the point of compliance is represented by the line connecting compliance monitoring wells MW-5 and MW-6 and extending down to the uppermost aquifer.  
[MHWMR 264.100(a)(3)]

#### IV.F. COMPLIANCE PERIOD

The compliance period shall continue until the groundwater protection standards for all constituents specified in Condition IV.D. has not been exceeded in any compliance or effectiveness monitoring well for a period of three consecutive years. [MHWMR 264.100(a)(4)]

#### IV.G. WELL LOCATION, INSTALLATION AND CONSTRUCTION

The Permittee shall install and maintain a groundwater monitoring program as specified below and depicted in Figure 1-2 of Attachment I [MHWMR 264.98(c); 264.100(d)]:

##### IV.G.1. Compliance Point Monitoring Wells

For the purposes of this permit, wells MW-2A, MW-3S, MW-4, MW-5 and MW-6 and/or any wells required under Condition IV.G.6 shall be designated the Compliance Point Monitoring Wells.

##### IV.G.2. Effectiveness Monitoring Wells

For the purposes of this permit, wells MW-3D, MW-7S, MW-9S, MW-15 and/or any wells required under Condition IV.G.6 shall be designated as Effectiveness Monitoring Wells.

##### IV.G.3. Boundary Control Monitoring Wells

For the purposes of this permit, wells MW-12, MW-16, MW-18 and/or any wells required under Condition IV.G.6 shall be designated Boundary Control Monitoring Wells

##### IV.G.4. Background Monitoring Well

For the purposes of this permit, well MW-1 and/or any wells required under Condition IV.G.6 shall be designated as the Background Monitoring Well.

##### IV.G.5. Detection Monitoring Wells

For the purposes of this permit, well MW-5, MW-6, and/or any wells required under Condition IV.G.6 shall be designated as the Detection Monitoring Well.

- IV.G.6. Additional Monitoring Wells  
Due to changes that may occur in groundwater flow direction under the groundwater monitoring program; construction, redesignation, or deletion of wells from the monitoring program may be required.
- IV.G.7. Monitoring Well Inspection  
The Permittee shall inspect the monitoring wells identified in Conditions IV.G.1-5 in accordance with the inspection plan included in Attachment C.
- IV.G.8. Replacement Procedures  
Should the Permittee determine during an inspection or sampling event that any well identified in Conditions IV.G.1-6 has been damaged such that it no longer meets the requirements of MHWMR 264.97(a) and (c), the Permittee shall notify the Executive Director in writing within seven (7) days of making such a determination and replace or repair the damaged well within thirty (30) days. The replacement well should be constructed to the same specifications as the well being replaced.
- IV.G.9. Deletion Procedure  
Any well deleted from the monitoring program shall be plugged and abandoned in accordance with Mississippi Office of Land and Water regulations. Well plugging and abandonment methods and certification shall be submitted to the Executive Director within thirty (30) days from the date the well is removed from the monitoring program.

#### IV.H. GROUNDWATER MONITORING REQUIREMENTS

The Permittee shall monitor the effectiveness of the corrective action program on groundwater quality and on groundwater flow across the entire extent of the contaminant plume emanating from the closed treated sludge impoundment (surface impoundment), as described in Attachment A.. [MHWMR 264.100(d)]

##### IV.H.1. Monitoring Parameters and Frequencies

- IV.H.1.a. The Permittee shall determine the groundwater quality at each monitoring well at the frequency and for the parameters specified below:

Well	Parameters	Sampling Frequency
MW-1 MW-2A MW-3S MW-4	All MHWMR 264 Appendix IX constituents	Annually to begin within ninety (90) days after meeting the groundwater protection standard.
MW-1 MW-2A MW-3S MW-4 MW-5 MW-6	All hazardous constituents specified under Condition IV.D.	Semi-annually
MW-3D MW-7S MW-9S MW-15	All MHWMR 264 Appendix IX constituents	Within ninety (90) days after meeting the groundwater protection standard
	All hazardous constituents specified under Condition IV.D.	Semi-annually
MW-12 MW-16 MW-18	All hazardous constituents specified under Condition IV.D.	Semi-annually

IV.H.1.b. During the corrective action monitoring period, one compliance point or effectiveness well in which contamination has been detected shall be sampled and analyzed annually for all MHWMR Part 264 Appendix IX constituents. If contamination has been detected in more than one well, then the annual Appendix IX analysis shall be rotated among those effected wells.

IV.H.2. Additional Parameters

IV.H.2.a. If additional Appendix IX constituents are found in the compliance point and/or effectiveness monitoring wells, the Permittee shall resample the affected well(s) within thirty (30) days and repeat the Appendix IX analysis for the detected constituents.

IV.H.2.b. If the presence of Appendix IX constituents is confirmed, the Permittee shall report the concentrations of these additional constituents to the Executive Director within seven (7) days after completion of the analysis and add these constituents to the monitoring list in Condition IV.D.

IV.H.2.c. The Permittee may elect to forego the requirements of Condition IV.H.2.a. and add the constituents to the monitoring list as required in Condition IV.H.2.b.

#### IV.I. SAMPLING AND ANALYSIS PROCEDURES

The Permittee shall use the following techniques and procedures when obtaining and analyzing samples from groundwater monitoring wells described in Condition IV.H. [MHWMR 264.100(d)]:

- IV.I.1. Prior to collecting groundwater samples from any monitoring well the Permittee shall measure the water level in the well, calculate the volume of water in the well, and purge the well per the procedures in the Groundwater Sampling and Analysis Plan (Attachment I).
- IV.I.2. Samples shall be collected using the techniques in the Groundwater Sampling and Analysis Plan (Attachment I).
- IV.I.3. Samples shall be preserved and shipped in accordance with the procedures specified in the Groundwater Sampling and Analysis Plan (Attachment I).
- IV.I.4. Samples shall be analyzed in accordance with the procedures specified in the Groundwater Sampling and Analysis Plan (Attachment I).
- IV.I.5. Samples shall be tracked and controlled using the chain-of-custody procedures specified in the Groundwater Sampling and Analysis Plan (Attachment I).
- IV.I.6. Appropriate QA/QC measures shall be used, including equipment, field, and trip blanks, as specified in the Groundwater Sampling and Analysis Plan (Attachment I).

#### IV.J. ELEVATION OF THE GROUNDWATER SURFACE

- IV.J.1. The Permittee shall determine the elevation of the groundwater surface to the nearest 0.01 foot at each well each time the groundwater is sampled per Condition IV.I.1.
- IV.J.2. The Permittee shall determine and record the surveyed elevation of any future monitoring well when installed.



#### IV.K. STATISTICAL PROCEDURES

- IV.K.1. When evaluating the monitoring results to determine the effects of corrective action measures, in accordance with Permit Condition IV.H., the Permittee shall conduct the statistical procedures as presented in Permit Attachment I, Figure I-6.
- IV.K.2. The Permittee shall use the statistical procedure specified in Permit Condition IV.K.1. to evaluate the groundwater analytical data for the detection monitoring system, except as specified in Permit Condition IV.K.4.
- IV.K.3. When the concentration of a constituent is reported by the laboratory as not detected or below the method detection limit, the Permittee shall use the method detection limit value for that constituent in evaluating monitoring results.
- IV.K.4. For compounds that are not naturally occurring and/or those compounds not detected in background samples, the following conditions will constitute significant evidence of a release (subject to QA/QC checks and confirmation by retesting), and shall be used in lieu of the statistical procedures as presented in Permit Attachment I, Figure I-6
- IV.K.4.a. A compound is detected above a PQL in a downgradient well.
- IV.K.4.b. More than one compound is detected in a well above the MDL but below the PQL in a single event.
- IV.K.4.c. One compound is detected in a well above the MDL but below the PQL twice or more in a twelve month period.
- IV.K.4.d. A compound (or compounds) is detected above the MDL but below the PQL, either in a single well or in multiple wells, and a review of data shows trends or indications that a release may have occurred. Such a review of available data, including graphical and spatial analyses, must be documented by the facility/owner/operator either at the next scheduled monitoring event or as otherwise required by permit condition, regulation or law
- IV.K.5. A retest will consist of analyzing two additional samples. Such samples must be collected on separate events (i.e., after re-purging the wells prior to sampling). It will not be necessary; however, to obtain

an independent sample with respect to the interval of time between subsequent samples. Confirmation of a detect will occur if analysis of either sample collected during the retest detects the compounds found in the original sample. If additional or different compounds are found in a retest further sampling may be necessary to determine if a release of additional constituents has occurred.

#### IV.L. MONITORING PROGRAM AND DATA EVALUATION

IV.L.1. The Permittee shall establish and implement a groundwater monitoring program to demonstrate the effectiveness of the corrective action program. Groundwater monitoring shall be conducted and shall be as effective as the program for compliance monitoring under MHWMR 264.97 and MHWMR 264.99. The Permittee shall determine groundwater quality as follows:

IV.L.1.a. The Permittee shall collect, preserve and analyze samples in accordance with Permit Condition IV.I.

IV.L.1.b. The Permittee shall determine the concentrations of the hazardous constituents specified in Permit Condition IV.D., throughout the compliance period and any extension due to corrective action implementation, to demonstrate conformance with the groundwater protection standards. The Permittee shall determine the concentration of hazardous constituents in groundwater at each monitoring well at the compliance point, at least semi-annually. [MHWMR 264.96; MHWMR 264.100(d)]

IV.L.1.c. The Permittee shall determine the groundwater flow rate and direction in the uppermost aquifer at least annually. [MHWMR 264.99(e)]

IV.L.1.d. The Permittee shall statistically compare the measured concentration of each monitored hazardous constituent with its concentration limit in the groundwater protection standard each time groundwater quality is determined, in accordance with Permit Condition IV.C. The Permittee must compare the groundwater quality measured at each point of the compliance monitoring well and any other specified wells, as stated in Permit Condition IV.H. and in accordance with the procedures specified in Permit Condition IV.I.

IV.L.2. The Permittee shall perform detection monitoring for the constituents listed in Condition IV.D. for the groundwater immediately

downgradient of the closed cooling water pond. The Permittee shall determine ground-water quality as follows:

- IV.L.2.a. The Permittee shall use the background mean value established by previous sampling and in accordance with MHWMR 264.97 for each constituent listed in Condition IV.D.
- IV.L.2.b. The Permittee shall sample MW-1 at least semiannually. The Permittee shall compare each new measurement of a constituent's concentration in MW-1 to its background mean value. If the new semiannual observation falls within the background mean value, it will be added to the background mean value database from which the new background mean value will be calculated.
- IV.L.2.c. If a new semiannual measurement of a constituent's concentration in MW-1 falls outside of the background mean value, the Permittee shall resample the affected well and repeat the comparison for the affected constituent(s) within thirty (30) days. If the second observation falls within the background mean value, the Permittee shall reject the first observation as an outlier and add the second observation to the background mean value database. If the second observation also lies outside the background mean value, the Permittee shall notify the Executive Director in writing within seven (7) days.

#### IV.M. RECORDKEEPING AND REPORTING

- IV.M.1. The Permittee shall enter all monitoring, testing, and analytical data obtained in the operating record. The data must include all computations, calculated means, variances, and results of the statistical test(s) that the Executive Director has specified. [MHWMR 264.73(b)(6)]
- IV.M.2. Corrective Action Recordkeeping and Reporting
  - IV.M.2.a. The Permittee shall report, in writing, semi-annually to the Executive Director on the effectiveness of the corrective action program. These reports shall be submitted until the corrective action program has been completed. [MHWMR 264.100(g)]
  - IV.M.2.b. The Permittee shall submit the analytical results required by Condition IV.L. and IV.M.1., annually by March 1 of each year.

IV.M.3. Detection Monitoring Recordkeeping and Reporting

IV.M.3.a. If the Permittee determines pursuant to Condition IV.L. there is a statistically significant increase above the background value for a constituent specified in Condition IV.D., the Permittee shall:

IV.M.3.a.1. Notify the Executive Director in writing within seven (7) days. [MHWMR 264.98(g)(1)]

IV.M.3.a.2. Immediately sample the groundwater in the Detection Monitoring Wells (MW-5, MW-6) and determine the concentration of all constituents identified in Appendix IX of MHWMR Part 261. [MHWMR 264.98(g)(2)]

IV.M.3.a.3. Establish the background values for each Appendix IX constituent found in the groundwater. [MHWMR 264.98(g)(3)]

IV.M.3.a.4. Within ninety (90) days, the Permittee shall submit to the Executive Director an application for a permit modification to establish a compliance monitoring program meeting the requirements of MHWMR 264.99. The application must include the information as specified in MHWMR 264.98(g)(4).

IV.M.3.a.5. The Permittee shall submit a corrective action feasibility plan to the Executive Director within 180 days. [MHWMR 264.98(g)(5)]

IV.M.3.b. If the Permittee determines, pursuant to Condition IV. I, there is a statistically significant increase above the background values for the parameters specified in Condition IV.D., a demonstration may be made that a source other than a regulated unit caused the increase or that the increase resulted from error in sampling, analysis, or evaluation. In such cases, the Permittee shall:

IV.M.3.b.1. Notify the Executive Director in writing within seven (7) days that he intends to make a demonstration. [MHWMR 264.98(g)(6)(i)]

IV.M.3.b.2. Within ninety (90) days, submit a report to the Executive Director which demonstrates that a

source other than a regulated unit caused the increase, or that the increase resulted from error in sampling, analysis, or evaluation. [MHWMR 264.98(g)(6)(ii)]

IV.M.3.b.3. Within ninety (90) days, submit to the Executive Director an application for a permit modification to make any appropriate changes to the detection monitoring program at the facility. [MHWMR 264.98(g)(6)(iii)]

IV.M.3.b.4. Continue to monitor in accordance with the detection monitoring program at the facility. [MHWMR 264.98(g)(6)(iv)]

#### IV.N. REQUEST FOR PERMIT MODIFICATION

If the Permittee or the Executive Director determines the corrective action groundwater monitoring program no longer satisfies the requirements of the regulations, the Permittee must, within 90 days of the determination, submit an application for a permit modification to make any appropriate changes to the program which will satisfy the regulations. [MHWMR 264.100(d)]

## **MODULE V – CORRECTIVE ACTION PROGRAM FOR REGULATED UNITS**

### **V.A. APPLICABILITY**

The conditions of this module apply to the closed treated sludge impoundment, as described in Attachment H and depicted in Figures 1-1 and 1-2 of Attachment I.

### **V.B. CORRECTIVE ACTION PLAN**

The Permittee shall implement the corrective action measures described in the Corrective Action Plan found in Attachment H of this permit. The hazardous constituents shall be removed by pumping contaminated groundwater and non-aqueous phase liquids (NAPLs) from recovery wells designated in the Corrective Action Plan. These wells are to be pumped at a rate approved by the Executive Director and the water to be handled and disposed in accordance with applicable water pollution control laws and regulations. These rates must be sufficient to recover the entire extent of the plume of contamination. [MHWMR 264.100(b)]

### **V.C. CORRECTIVE ACTION PERIOD**

V.C.1 The Permittee shall conduct the corrective action measures specified in this permit until the concentration of hazardous constituents specified in Condition IV.D. have been reduced to levels below their respective concentration limits, as specified in Condition IV.D. [MHWMR 264.100(e)(4)]

V.C.2. The Permittee shall conduct corrective action measures to the extent necessary to ensure that the groundwater protection standards are not exceeded. The Permittee may terminate corrective action measures if he can demonstrate, based on data from the groundwater monitoring program in Module IV, that the groundwater protection standards have not been exceeded for a period of three consecutive years. [MHWMR 264.100(f)]

V.C.3. Upon termination of the corrective action measures, the Permittee shall perform a complete MHWMR Part 264 Appendix IX analysis on all effectiveness monitoring wells, designated in Condition IV.G.2., to confirm that no MHWMR 264 Appendix IX hazardous constituents are present above the groundwater protection standard in the groundwater.

V.C.4. Upon termination of the corrective action measures, the Permittee shall perform a complete MWHMR Part 264 Appendix IX analysis on all compliance point monitoring wells, designated in Condition IV.G.1., to confirm that no MHWMR 264 Appendix IX hazardous constituents

are present above the groundwater protection standard in the groundwater.

- V.C.5. If corrective action procedures are terminated in accordance with Condition V.C.2., they shall be reinstated if at any time during the post-closure care period that the groundwater protection standards are exceeded for any hazardous constituent at the point of compliance.

V.D. LIST OF HAZARDOUS CONSTITUENTS

The Permittee shall conduct corrective action to reduce all constituents specified in Condition IV.D. below the indicated concentration limits. [MHWMR 264.100(a)(1)]

V.E. CONCENTRATION LIMITS

The Permittee must continue corrective action to the extent necessary to ensure that the concentration of hazardous constituents in the groundwater will not exceed the groundwater protection standards as specified by the concentration limits in Condition IV.D. [MHWMR 264.100(a)(2)]

V.F. CORRECTIVE ACTION IMPLEMENTATION

All corrective action measures contained in the Corrective Action Plan (Attachment H) have already been implemented. [MHWMR 264.100(c) and (e)(3)]

V.G. CORRECTION ACTION TO PROPERTY BOUNDARY

The Permittee shall pump, treat, and monitor contaminated groundwater from the point of compliance to the property boundary and beyond, if applicable, where necessary to protect human health and the environment. [MHWMR 264.100(e)(1) and (2)]

V.H. REPORTS

The Permittee shall submit reports on the effectiveness of the corrective action program on a semi-annual basis. These reports shall be submitted semi-annually by March 1 and September 1 of each year and shall contain the following information, at a minimum:

- V.H.1. Groundwater elevations measured in all monitoring wells;
- V.H.2. Potentiometric maps showing groundwater flow direction;
- V.H.3. The results of all groundwater analyses;
- V.H.4. At least annually, a determination of the groundwater flow rate; and

V.H.5. At least annually, isoconcentration maps showing plumes for each monitored constituent and a composite map indicating the total extent of groundwater contamination.

V.I. MODIFICATIONS

If the Permittee or the Executive Director determines that the corrective action program no longer satisfies the requirements of the regulations, the Permittee must, within 90 days of the determination, submit an application for a permit modification to make any appropriate changes to the program which will satisfy the regulations. [MHWMR 264.100(h)]

V.J. SPECIAL CONDITIONS

Construction and use of additional extraction wells, monitoring wells, and/or other components installed as a part of the corrective action measures shall not require a permit modification. However, the Permittee shall notify the Executive Director of such activities within seven days after initiating these changes.



## **MODULE VI – LAND DISPOSAL RESTRICTIONS**

### **VI.A. GENERAL RESTRICTIONS**

MHWMR 268 identifies hazardous wastes that are restricted from land disposal and defines those limited circumstances which an otherwise prohibited waste may continue to be land disposed. The Permittee shall maintain compliance with the requirements of MHWMR 268. Where the Permittee has applied for an extension, waiver or variance under MHWMR 268, the Permittee shall comply with all restrictions on land disposal under this Module once the effective date for the waste has been reached pending final approval of such application.

### **VI.B. LAND DISPOSAL PROHIBITIONS AND TREATMENT STANDARDS**

- VI.B.1. A restricted waste identified in MHWMR Part 268, Subpart C, may not be placed in a land disposal unit without further treatment unless the requirements of MHWMR 268, Subparts C and/or D are met.
- VI.B.2. The storage of hazardous wastes restricted from land disposal under MHWMR 268 is prohibited unless the requirements of MHWMR 268, Subpart E, are met.

## **MODULE VII – ORGANIC AIR EMISSIONS REQUIREMENTS FOR PROCESS VENTS AND EQUIPMENT LEAKS**

### **VII.A. GENERAL INTRODUCTION**

In the June 21, 1990, Federal Register, EPA published the final rule for Phase I Organic Air Emission Standards (40 CFR Parts 264 and 265, Subparts AA and BB) for hazardous waste treatment, storage and disposal facilities. The State of Mississippi adopted these regulations in September, 1990. Subpart AA contains emission standards for process vents associated with distillation, fractionation, thin-film evaporation, solvent extraction, and air or steam stripping operations that process hazardous waste with an annual average total organic concentration of at least ten (10) part per million (ppm) by weight. Subpart BB contains emission standards that address leaks from specific equipment (i.e. pumps, valves, compressors, etc.) that contains or contacts hazardous waste that has an organic concentration of at least ten (10) percent by weight.

### **VII.B. ORGANIC AIR EMISSION STANDARDS**

Prior to constructing any equipment with process vents subject to the requirements of MHWMR 264, Subpart AA or installing any additional equipment subject to the requirements of MHWMR 264, Subpart BB, the Permittee shall supply the specific Part B information required pursuant to MHWMR 270.24 and 270.25, as applicable.

## MODULE VIII – WASTE MINIMIZATION

### VIII.A. APPLICABILITY

No less than one year from the date of the future generation of hazardous waste and pursuant to MHWMR 264.73(b)(9); Section 3005(h) of RCRA, 42 U.S.C. 6925(h); and Section 49-31-1 et seq., Mississippi Code of 1972; the Permittee must certify, no less often than annually, that:

- VIII.A.1. The Permittee has a program in place to reduce the volume and toxicity of hazardous waste generated to the degree determined by the Permittee to be economically practicable; and
- VIII.A.2. The proposed method of treatment, storage or disposal is the most practical method available to the Permittee which minimizes the present and future threat to human health and the environment.

### VIII.B. WASTE MINIMIZATION CERTIFICATION OBJECTIVES

Any future waste minimization program under Condition VIII.A should include the following elements:

#### VIII.B.1. Top Management Support

- VIII.B.1.a. Dated and signed policy describing management support for waste minimization and for implementation of a waste minimizing plan.
- VIII.B.1.b. Description of employee awareness and training programs designed to involve employees in waste minimization planning and implementation to the maximum extent feasible.
- VIII.B.1.c. Description of how a waste minimization plan has been incorporated into management practices so as to ensure ongoing efforts with respect to product design, capital planning, production operations and maintenance.

#### VIII.B.2. Characterization of Waste Generation

Identification of types, amounts and hazardous constituents of waste streams with the source and date of generation.

VIII.B.3. Periodic Waste Minimization Assessments

- VIII.B.3.a. Identification of all points in a process where materials can be prevented from becoming a waste, or can be recycled.
- VIII.B.3.b. Identification of potential waste reduction and recycling techniques applicable to each waste, with a cost estimate for capital investment and implementation.
- VIII.B.3.c. Specify performance goals, preferably quantitative, for the source reduction of waste by stream. Whenever possible, goals should be stated as weight of waste generated per standard unit of production, as defined by the generator.

VIII.B.4. Cost Allocation System

- VIII.B.4.a. Identification of waste management costs for each waste, factoring in liability, transportation, recordkeeping, personnel, pollution control, treatment, disposal, compliance and oversight to the extent feasible.
- VIII.B.4.b. Description of how departments are held accountable for the wastes they generate.
- VIII.B.4.c. Comparison of waste management costs with costs of potential reduction and recycling techniques applicable to each waste.

VIII.B.5. Technology Transfer

Description of efforts to seek and exchange technical information on waste minimization from other parts of the company, other firms, trade associations, technical assistance programs, and professional consultants.

VIII.B.6. Program Evaluation

- VIII.B.6.a. Description of types and amounts of hazardous waste reduced or recycled.

- VIII.B.6.b. Analysis and quantification of progress made relative to each performance goal established and each reduction technique to be implemented.
- VIII.B.6.c. Amendments to waste minimization plan and explanation.
- VIII.B.6.d. Explanation and documentation of reduction efforts completed or in progress before development of the waste minimization plan.
- VIII.B.6.e. Explanation and documentation regarding impediments to hazardous waste reduction specific to the individual facility.

VIII.C. RECORDKEEPING AND REPORTING

- VIII.C.1. Annually, the Permittee shall submit a certification report of the types and quantities of waste generated, and the types and quantities of waste reduced/minimized. This certified report shall include a narrative study explaining the waste generated and minimization data, a description of goals and progress made in reducing/minimizing the generation of wastes, and a description of any impediment to the reduction and minimization of waste.
- VIII.C.2. The Permittee shall maintain copies of this certification in the facility operating record as required by MHWMR 264.73.

## **MODULE IX - PHASE II RCRA ORGANIC AIR EMISSION REQUIREMENTS**

### **IX.A. GENERAL INTRODUCTION**

On December 6, 1994, EPA published the final rule for Phase II Organic Air Emissions Standards (40 CFR Parts 264 and 265, Subpart CC) for hazardous waste treatment, storage, and disposal facilities, including certain hazardous waste generators accumulating waste on-site in RCRA permit-exempt (90-day) tanks and containers. In general, under these standards air emissions controls must be used for tanks, surface impoundments, containers and miscellaneous units which contact hazardous waste containing an average volatile organic concentration greater than 500 ppmw at the point of origination determined by the procedures outlined in MHWMR 264.1083(a), except as specifically exempted under MHWMR 264.1080 and 264.1082.

### **IX.B. ORGANIC AIR EM ISSION STANDARDS**

Prior to installing any tank, container, surface impoundment or miscellaneous unit subject to MHWMR Part 264, Subpart CC, or modifying an existing process, waste handling, or tank or container such that the unit(s) will become subject to MHWMR Part 264 Subpart CC, the Permittee shall apply for a permit modification under MHWMR 270.42, and provide specific Part B application information required under MHWMR 270.14-17 and 270.27, as applicable, with the modification request.

**ATTACHMENT A**  
**GENERAL FACILITY DESCRIPTION**

**ATTACHMENT B**  
**POST-CLOSURE PLAN**



**ATTACHMENT C**  
**INSPECTION AND SECURITY PLAN**

**ATTACHMENT D**  
**HAZARDOUS WASTE PERMIT APPLICATION PART A**

**ATTACHMENT E**  
**RESERVED**

**ATTACHMENT F**  
**RESERVED**

**ATTACHMENT G**  
**FIGURES**

**ATTACHEMNT H**  
**CORRECTIVE ACTION PLAN**

**ATTACHMENT I**  
**GROUNDWATER SAMPLING AND ANALYSIS PLAN**