

# STATE OF MISSISSIPPI HAZARDOUS WASTE MANAGEMENT PERMIT

## THIS CERTIFIES THAT

Cavenham Forest Industries -Gulfport Site.  
9502 Creosote Road  
Gulfport, MS  
Harrison County  
MSD 057 226 961

is hereby authorized to conduct post closure care for a closed surface impoundment

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: October 5, 2007

Modified: JUL 24 2015

MISSISSIPPI ENVIRONMENTAL QUALITY PERMIT BOARD



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AUTHORIZED SIGNATURE

MISSISSIPPI DEPARTMENT OF ENVIRONMENTAL QUALITY

Permit No.: HW-057-226-961

Expires: September 30, 2017

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### **LIST OF ATTACHMENTS**

<b>Attachment A</b>	<b>HAZARDOUS WASTE PERMIT APPLICATION PART A</b>
<b>Attachment B</b>	<b>FACILITY DESCRIPTION</b>
<b>Attachment C</b>	<b>POST-CLOSURE PLAN AND FINANCIAL REQUIREMENTS</b>

<b>Attachment D</b>	<b>GROUND WATER SAMPLING AND ANALYSIS PLAN</b>
<b>Attachment E</b>	<b>REVISED CORRECTIVE ACTION PLAN</b>
<b>Attachment F</b>	<b>INSPECTION AND SECURITY PLAN</b>

## **MODULE 1 – GENERAL PERMIT CONDITIONS**

### **I.A. EFFECT OF 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 and/or regulations governing the treatment and handling of explosives. 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 and permit conditions.

#### **I.B.2 Permit Renewal**

This permit may be renewed as specified in MHWMR 270.30(b) and Permit Condition 1.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 designed 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, 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 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 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 fourth 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, 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 condition of the permit;
- I.E.8.c. Inspect at reasonable times any facility, equipment (including monitoring and control equipment), practices, 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 IV Environmental Compliance Branch's Standard Operating Procedure and Quality Assurance Manual](#) (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 of Wastewater Analysis, or an equivalent method approved by the Executive Director.

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. These periods may be extended by the Executive Director at any time and are 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.

I.E.9.c. Records of monitoring information shall specify:

- i. The dates, exact place, and times of sampling or measurements;
- ii. The individuals who performed the sampling or measurements;
- iii. The dates the analyses were performed;
- iv. The individuals 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, spill, accident or other occurrence which may endanger health or the environment. (Note: the Permittee shall advise neighboring members of the community and City and County emergency response officials as soon as possible). Any such information shall be reported orally to the Executive director 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 of 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 hazard 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 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

Whenever the Permittee becomes aware that it failed to submit any relevant facts or submitted incorrect information in any document(s) submitted to the Executive Director, the Permittee shall promptly submit such facts or information.

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 in 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 the Executive Director shall be signed and certified in accordance with MHWMR 270.11.

I.G. REPORTS, NOTIFICATIONS, AND SUBMISSSTIONS 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  
P.O. Box 10385  
Jackson, MS 39289-0385

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.

I.I. PERMIT REVIEW PERIOD

This permit shall be reviewed by the Executive Director five (5) years after the date of issuance and modified as necessary as required under MHWMR 270.50(d).

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

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

This permit is issued to Cavenham Forest Industries, Inc. for their Gulfport, Mississippi Facility [MSD 057 226 961] as described in the permit application submitted on January 27, 2006, and modified on March 13, 2007 ; and hereinafter referred to as “the application.” The permit authorizes the Permittee to conduct post closure and corrective action activities.

### **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 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 Attachments B and F of this permit.

### **II.E. GENERAL INSPECTION REQUIREMENTS**

The Permittee shall comply with the inspection requirements of MHWMR Section 264.15 and follow the inspection schedule contained in Attachment F. 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. GENERAL WASTE ANALYSIS

Not applicable to a closed facility.

II.G. SPECIAL CONDITIONS

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.H. LOCATION STANDARD

The Permittee shall provide protection from washouts of hazardous waste from the units specified in Condition II. A. by providing maintenance to the final cover, including the rip-rap, on an “as-needed” basis to ensure that the extent and depth of the system do not fall below the design criteria specified in Attachment B.

II.I. GENERAL POST-CLOSURE REQUIREMENTS

II.I.1. Post-Closure Care Period

The Permittee shall conduct post-closure care for the closed surface impoundment after completion of closure of the unit and continue for 30 years after that date. Post-closure care of the unit shall be in accordance with MHWMR 264.117 and the Post Closure Plan.

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

II.I.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 C, as required by MHWMR 264.120.

II.J. COST ESTIMATE FOR FACILITY POST-CLOSURE and CORRECTIVE ACTION

- II.J.1. The Permittee's most recent post-closure cost estimate, including Corrective Action, is contained in the application.
- II.J.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), or if there is a change in the Corrective Action Plan.
- II.J.4. The Permittee must keep at the facility, or at a mutually agreed upon location, the latest post-closure/corrective action cost estimate as required by MHWMR Section 264.144(d).

II.K. FINANCIAL ASSURANCE FOR FACILITY POST-CLOSURE

The Permittee shall demonstrate continuous compliance with MHWMR 264.145 and MHWMR 264.101(b) by providing documentation of financial assurance, as required by MHWMR Section 264.151, in at least the amount of the cost estimate required by Condition II.J. Changes in financial assurance mechanisms must be approved by the Executive Director pursuant to MHWMR Section 264.145.

II.L. 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)(6) and 264.280(c). These records will be maintained at the facility or in the custody of the facility contact person, and shall be made available upon request. At a minimum, the following information must be recorded and maintained in the operating record until final closure (as defined in MHWMR 260.10):

- Records of inspections
- Monitoring, testing and analytical data
- Groundwater monitoring data

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

The Permittee shall comply with MHWMR 264.148 whenever necessary.

II.N. ANNUAL REPORT

The permittee shall report, by March 1 of each year, the types and amounts of hazardous waste treated, stored, recycled, and/or disposed during the preceding calendar year, per the requirements of MHWMR 264.S1, when applicable.



## **MODULE III – POST-CLOSURE CARE**

### **III.A. APPLICABILITY**

The Permittee shall provide post-closure care for the closed surface impoundment unit described in Attachment A and in Attachment B, Figure 3, in accordance with MHWMR 264.110.

### **III.B. POST-CLOSURE PROCEDURES AND USE OF PROPERTY**

III.B.1. The Permittee shall conduct post-closure care for land disposal units, to begin after completion of closure of the system and continue for 30 years after the date, except that the 30-year 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.

III.B.2. The Permittee shall maintain and monitor the ground-water monitoring system and comply with all other applicable requirements of MHWMR 264, Subpart F during the post-closure period.

III.B.3. The Permittee shall comply with the requirements for land disposal units as follows:

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, Attachment C;

III.B.3.b. Maintain drainage control structures, benchmarks, security devices, and monitoring wells;

III.B.3.c. Prevent run-on and run-off from eroding or otherwise damaging the final cover;

- III.B.3.d. Maintain and monitor the groundwater monitoring system and comply with all other applicable requirements of Subpart F of MHWMR Part 264.
- III.B.3.e. All gas vents shall be maintained so that they are free of cracks or breaks, and the outlets shall be free of obstructions.
- III.B.3.f. All surveyed benchmarks shall be maintained.

III.B.4. The Permittee shall comply with all security requirements, as specified in Permit Attachment F.

III.B.5. The Permittee shall not allow any use of the units designated in Condition III.A., which will disturb the integrity of the final cover, or the function of the facility's monitoring system during the post-closure care period.

III.B.6. The Permittee shall implement the Post-Closure Plan, Permit Attachment C. All post-closure care activities must be conducted in accordance with the provisions of the Post-Closure Plan.

### III.C. INSPECTIONS

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

### III.D. NOTICES AND CERTIFICATION

III.D.1. 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, then 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).

III.D.2. No later than sixty (60) days after completion of the established post-closure care period for each 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(1).

### III.E. FINANCIAL ASSURANCE

The Permittee shall maintain financial assurance during the post-closure period and comply with all applicable requirements of MHWMR 264, Subpart H.

### III.F. POST-CLOSURE PERMIT MODIFICATION

The Permittee must request 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 proposed 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 60 days prior to the proposed change in facility design or operation, or no later than 60 days after an unexpected event has occurred which has affected the Post-Closure Plan.

## **MODULE IV – GROUNDWATER PROTECTION**

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

The requirements of this part apply to the closed surface impoundment unit and affected adjacent property as depicted in Attachment B, Figure 3.

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

The Permittee shall conduct corrective action and corrective action ground-water monitoring as outlined herein as required by MHWMR 264.91(a)(3). When the concentrations of all hazardous constituents under Condition IV.D. have not exceeded the ground water protection standards under Condition IV.C. along the point of compliance and in all compliance monitoring wells for a period of three consecutive years, the Permittee may petition the Executive Director for a permit modification to conduct a detection monitoring program or post-closure ground water monitoring program.

### **IV.C. GROUND WATER PROTECTION STANDARDS**

The ground water protection standards under MHWMR Section 264.92 shall be equal to concentration limits in Condition IV.D. of this permit during the compliance monitoring program. The Permittee may petition the Executive Director for a permit modification during the compliance period to establish groundwater protection standards based on alternate concentration limits under MHWMR 264.94(b).

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

The following constituents shall be included in ground water quality analyses conducted during compliance monitoring as specified under MHWMR 264.93.

The ground water protection standards in Condition IV.C. of this permit shall be based on the following concentration limits, as required under MHWMR 264.94. The analytical methods and method detection limits shall be designated in all reports of analyses.

<b><u>Hazardous Constituents</u></b>	<b><u>Concentration Limits (µg/l)</u></b>
Acenaphthylene	10
Acenaphthene	10
Anthracene	10

<u>Benzene</u>	5
Benzo[a]anthracene	10
<u>Benzo[a]pyrene</u>	10
Benzo[b]fluoroanthrene	10
Benzo[k]fluoroanthrene	10
Benzo[g,h,i]perylene	10
Chrysene	10
Dibenzo[a,h]anthracene	10
Dibenzofuran	10
<u>2,4-Dimethylphenol</u>	10
<u>Fluoranthene</u>	10
Fluorene	10
Ideno[1,2,3-cd]pyrene	10
Isophorone	10
2-Methylnaphthalene	10
<u>Naphthalene</u>	10
<u>Pentachlorophenol</u>	50
Phenanthrene	10
Phenol	10
Pyrene	10
Tetrachlorophenols	10
Toluene	5
Xylene	5

#### IV.E. POINT OF COMPLIANCE

As specified in MHWMR 264.95, the point of compliance for the waste management unit is represented by a vertical surface located at the hydraulically down gradient limit of the waste management area, and which extends down vertically into the uppermost aquifer beneath the closed surface impoundment unit.

#### IV.F. COMPLIANCE PERIOD

The compliance period, during which the ground water protection standard applies, shall be defined to begin with the effective date of this permit and continue until the ground water protection standard for all constituents specified in Permit Condition IV.D. have not been exceeded in all of the compliance monitoring wells for a period of three (3) consecutive years.

#### IV.G. GROUND WATER MONITORING PROGRAM

The Permittee shall conduct groundwater corrective action monitoring as described in Attachment D, the Groundwater Monitoring Plan, and as described in this permit, in accordance with the requirements of MHWMR

264.91 (a)(3) and 264.100. The monitoring program will remain in effect throughout the term of this permit unless the permit is modified under Condition IV.P.4.

#### IV.H. GROUND WATER MONITORING SYSTEM

The Permittee shall maintain a ground water monitoring system to comply with the requirements of MHWMR 264.95, 264.97 and 264.100, in accordance with the plans and specifications in the Groundwater Monitoring Plan, Attachment D. These wells shall be maintained at the locations depicted in Figure D-1, Attachment D.

##### IV.H.1. Well Replacement

Should the Permittee determine during an inspection or sampling event that any well identified in Condition V.H. has been damaged such that it no longer meets the requirements of MHWMR 264.97(a)(1), (2) and (c), the Permittee shall notify MDEQ in writing within seven (7) days of making such a determination and replace or repair the damaged well within thirty (30) days. Replacement wells should be constructed to the same specifications as the well being replaced in accordance with the procedures described in the application.

##### IV.H.2. Compliance Monitoring Wells

For the purpose of this permit, wells RC-1, RC-2, and RC-3, and and/or any applicable wells required under Condition IV.H.6. shall be designated as the compliance monitoring wells.

##### IV.H.3. Corrective Action "Effectiveness" Monitoring Wells

Monitoring wells DG-2, DG-6A, RW-3, RW-7, RW-10, and/or other wells required under Condition IV.H.6. shall be used to monitor the effectiveness of the corrective action program and shall be designated as Effectiveness Monitoring Wells.

##### IV.H.4. Background Monitoring Wells

For the purpose of this permit, monitoring well MW-2 and/or other wells required under Condition IV.H.6 shall be designated as the background monitoring well.

IV.H.5. Boundary Control Monitoring Wells

For the purposes of this permit, wells PW-3, PW-7S, PW-7W, PW-8, and/or any applicable wells required under Condition IV.H.6. shall be designated as Boundary Control Monitoring Wells.

IV.H.6. Additional Monitoring Wells

Due to the possibility of change in the ground water conditions and/or plume location, it may be necessary to require the construction of additional monitoring wells, change the designation of existing monitoring wells from the corrective action (i.e. compliance, “effectiveness” or background) or delete existing monitoring wells from the corrective action/compliance monitoring ground water monitoring system. The requirement of any such addition, change in designation, or deletion of monitoring wells from the corrective action/compliance ground water monitoring system will be in writing by the Executive Director or by his representative.

IV.I. GROUND WATER MONITORING REQUIREMENTS

The Permittee shall monitor the effectiveness of the corrective action on ground water quality and the ground water flow across the entire extent of the contamination plume emanating from the closed impoundment area, as required under MHWMR 264.100.

- IV.I.1. The Permittee shall determine the ground water quality at each monitoring well identified in Table IV-1 for the parameters and at the frequency specified therein.

**TABLE IV-1**

<b><u>WELLS</u></b>	<b><u>PARAMETERS</u></b>	<b><u>SAMPLING FREQUENCY</u></b>
RC-1 RC-2 RC-3	All MHWMR 264, Appendix IX parameters	Annually to begin within ninety (90) days after meeting the Ground water Protection Standard
	Groundwater protection constituents underlined in Condition IV.D.	Semi-annually
	Oil and Grease	Semi-annually
DG-2 DG-6A RW-3 RW-7 RW-10	Ground Water Protection constituents underlined in Condition IV.D.	Semi-Annually
	Oil and Grease	Semi-Annually
	All MHWMR 264, Appendix IX parameters	Annually to begin within ninety (90) days after meeting the Ground water Protection Standard
PW-3 PW-7S PW-7W PW-8	Ground Water Protection constituents underlined in Condition IV.D.	Semi-Annually
	Oil and Grease	

**IV.I.2. Dioxin Investigation**

The Permittee shall submit a plan to investigate the groundwater for the presence of dioxin and/or dioxin like compounds in the area enclosed by the RCRA cutoff wall as shown in Attachment D, Figure D-1. This plan is subject to approval by MDEQ and shall be submitted to the Environmental Permits Division within 180 days from the date of issuance of this permit. The proposed plan shall include an implementation schedule and reporting schedule. The permittee shall initiate the investigation in accordance with the approved plan within ninety (90) of receipt of written approval of the plan from MDEQ.



#### IV.I.3. Additional Parameters

If additional MHWMR 264 Appendix IX parameters are found in the compliance and/or effectiveness wells, the Permittee shall:

IV.I.3.a. Resample the effected well(s) within (30) days.

IV.I.3.b. Notify the Executive Director in writing within seven (7) days if the presence of Appendix IX constituents is confirmed.

IV.I.3.c. Add the additional MHWMR 264 Appendix constituents which are detected to the list of ground water protection constituents, specified under Condition IV.D.

#### IV.J. SAMPLING AND ANALYSIS PROCEDURES

IV.J.1. Prior to collecting ground water 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 using the procedures specified in the Groundwater Sampling and Analysis Plan, Attachment D.

IV.J.2. The Permittee shall collect ground water samples in accordance with the procedures set fourth in Attachment D.

IV.J.3. Ground water samples shall be preserved and shipped in accordance with the procedures specified in Attachment D.

IV.J.4. Ground water samples shall be tracked and controlled using the samples identification procedures and chain-of-custody procedures specified in Attachment D.

IV.J.5. Samples shall be analyzed in accordance with the procedures (methods) specified in accordance with the analytical methods, including appropriate QA/QC measures, as specified in the Groundwater Monitoring Plan, Attachment D

#### IV.K. ELEVATION OF THE GROUND WATER SURFACE

The Permittee shall determine and record the ground water surface elevation at each monitoring well, using the procedures described in Attachment D, each time ground water is sampled in accordance with Permit Condition IV.G.

#### IV.L STATISTICAL PROCEDURE

When evaluating monitoring results for hazardous constituents listed in IV.D., the Permittee shall compare the measured constituents at each well to the concentration limit specified in Condition IV.D.

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

- IV.M.1. The Permittee shall collect, preserve, and analyze ground water samples pursuant to Condition IV.J.
- IV.M.2. The Permittee shall determine the ground water concentration of underlined hazardous constituent(s) listed in Condition IV.D. at compliance and monitoring wells listed in Table IV-1 during the compliance period.
- IV.M.3. The Permittee shall determine the ground water flow rate and direction in the uppermost aquifer at least annually.
- IV.M.4. Pursuant to Condition IV.I.1, the Permittee must annually sample certain monitoring well and analyze for all constituents listed in Appendix IX of MHWMR 264 once the groundwater protection standard has been met in those wells to determine whether additional hazardous constituents are present in the uppermost aquifer.
- IV.M.5. For each underlined hazardous constituent identified in Condition IV.D., the Permittee shall compare the measured constituent concentration, at each compliance well, to the concentration limit specified in Condition IV.D. for the compliance monitoring period specified in Condition IV.F.
- IV.M.6. The Permittee shall perform the evaluation required by Condition IV.M.5. within sixty (60) days from the receipt and evaluation of the final QA/QC reviewed analytical results.
- IV.M.7. Upon completion of the compliance monitoring period, the Permittee may petition the Executive Director for a permit modification to conduct a detection monitoring program as specified in Condition IV.B.

IV.N. REPORTING AND RECORDKEEPING

- IV.N.1. The Permittee shall enter all monitoring, testing, and analytical data obtained pursuant to Module IV, in the operating record as required by MHWMR 264.73(b)(6).
- IV.N.2. During the period of compliance monitoring and corrective action, the Permittee shall submit the analytical results required by Conditions IV.G., IV.I. and IV.M. annually by January 31 of each year.
- IV.N.3. If the Permittee determines, pursuant to Condition IV.G. that the reported concentration at a boundary control monitoring well specified in Condition IV.H.5. exceeds the concentration limit for the constituent specified in Condition IV.D. (indicating that the ground water protection standard is being exceeded), the Permittee shall resample within (30) days to confirm the concentration of the constituent. If the second analysis confirms that the constituent exceeds the concentration limit, then the Permittee shall notify the Executive Director in writing seven (7) days from receipt and evaluation of the final QA/QC reviewed analytical results.
- V.N.4. The Permittee shall report concentrations of any additional Appendix IX constituents (i.e. not listed in Condition IV.D.) to the Executive Director within seven (7) days from receipt and review of the final QA/QC reviewed analytical results from the re-sampling (i.e. confirmatory) event.

IV.O. ASSURANCE OF COMPLIANCE

The Permittee shall assure that monitoring and corrective action measures necessary to achieve compliance with the ground water protection standard are taken during the term of the permit.

IV.P. SPECIAL REQUIREMENT IF THE GROUND WATER PROTECTION  
STANDARD IS EXCEEDED

- IV.P.1. The Permittee must notify the Executive Director in writing within seven (7) days if the ground water protection standard has been exceeded at any boundary monitoring well specified in IV.H.5. based upon two (i.e. initial and re-sampled) reported concentrations above the concentration limit specified in Condition IV.D. The notification must indicate which concentration limits have been exceeded.
- IV.P.2. If the Executive Director determines that the existing corrective action plan is determined to be insufficient to provide continued protection of human health and the environment, then the Permittee must submit to the Executive Director a permit modification to the corrective action program meeting MHWMR 264.100 requirements with 180 days.
- IV.P.3. The Permittee may make a demonstration that the ground water protection standard was exceeded due to the sources other than a regulated unit or errors in sampling, analysis or evaluation.
- IV.P.3.a. The Permittee must notify the Executive Director in writing, within seven (7) days of receipt and evaluation of QA/QC reviewed analytical results, that a demonstration will be made.
- IV.P.3.b. The permittee must submit a report to the Executive Director, within 90 days, that demonstrates that a source other than a regulated unit caused the ground-water protection standard to be exceeded or that the apparent non-compliance was a result of an error in sampling, analysis or evaluation.
- IV.P.3.c. The Permittee must continue the corrective action/compliance monitoring program in accordance with MHWMR 264.99 and 264.100.
- IV.P.4. If the Permittee or the Executive Director determines that the corrective action/compliance monitoring program no longer satisfies the requirements of MHWMR 264.99 and/or 264.100, the Permittee must submit a permit modification application within 90 days of the determination detailing appropriate changes to the compliance monitoring program.

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

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

V.A.1. The requirements of this module apply to the closed Hazardous Waste Surface Impoundment system and as described in Attachment B and identified as “Closed RCRA Units” in Figure 2.

V.A.2. Releases from the Buried Vacuum Pond and the Storm Drain will be remediated per the conditions of this module.

### **V.B. DESCRIPTION OF PLAN**

The Permittee shall continue to implement the Corrective Action Measures described in the Revised Corrective Action Plan, Attachment E. Groundwater recovery wells will continue to be used to pump contaminated groundwater to surface facilities. The recovered groundwater shall be treated and discharged in accordance with the NPDES Discharge Permit, or reinjected into the subsurface to enhance the remediation process. The remediation process will be further enhanced by the use air sparging well points, injection of treated groundwater into the subsurface by injection wells and groundwater infiltration trenches, and by providing nutrients as needed for biological activity. Free product recovered from the treatment system shall be managed in accordance with the provisions of MHWMR Part 262. Groundwater extraction rates shall be approved by the Executive Director and shall be sufficient to capture the entire plume of contamination.

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

V.C.1. The Permittee shall conduct corrective action measures specified in this permit and the Corrective Action Program Plan until the ground water protection standard for all constituents have not been exceeded at the point of compliance and in all compliance and “effectiveness” monitoring wells. The Permittee may submit a written request to terminate corrective action measures at individual and specific recovery locations based on quarterly ground water monitoring results. Any partial termination of corrective action measure shall be approved by the Executive Director.

V.C.2. Upon complete termination of corrective action measures, the Permittee shall perform a complete MHWMR 264 Appendix IX analysis on ground water samples from all compliance monitoring

wells to confirm that no additional Appendix IX hazardous constituents have entered the ground water.

- V.C.3. If all or part of the corrective action measures is terminated in accordance with condition V.C.1., they shall be reinitiated at any time during the post-closure care period that the ground water protection standard has been exceeded at the point of compliance or in any “effectiveness” monitoring well.

V.D. LIST OF HAZARDOUS CONSTITUENTS

The Permittee shall conduct corrective measures to remove any constituents specified in condition IV.D. in accordance with MHWMR 264.100(a)(1).

V.E. CONCENTRATION LIMITS

The concentration limits upon which the ground water protection standards shall be met are as specified in Condition IV.D. as required under MHWMR 264.94 and 264.100(a)(2).

V.F. ARIAL EXTENT OF CORRECTIVE ACTION

The Permittee shall pump, treat and monitor contaminated ground water from the point of compliance to the property boundary and beyond the facility boundary, where necessary to protect human health and the environment, as required under MHWMR 264.100(e).

V.G. REPORTS

The Permittee shall report the effectiveness of corrective action and groundwater monitoring results annually. The report shall be submitted by January 31 of each year.

V.H. MODIFICATIONS

- V.H.1. If the Permittee determines that corrective action measures are no longer effective, an application for a permit modification must be submitted within ninety (90) days of such a determination, as required under MHWMR 264.100(h).

- V.H.2. If the ground water protection standard has not been exceeded for a period of three (3) consecutive years in all of the compliance monitoring wells, the Permittee may petition the Executive Director to modify the ground water monitoring as appropriate.

## **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 placed on or in a land treatment, storage or disposal unit. 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 OF PROCESS VENT 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 and 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 later 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:

#### **A. Top Management Support**

- i. Dated and signed policy describing management support for waste minimization and for implementation of a waste minimizing plan.
- ii. Description of employee awareness and training programs designed to involve employees in waste minimization planning and implementation to the maximum extent feasible.
- iii. 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

#### **B. Characterization of Waste Generation**

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

C. Periodic Waste Minimization Assessments

- i. Identification of all points in a process where materials can be prevented from becoming a waste, or can be recycled.
- ii. Identification of potential waste reduction and recycling techniques applicable to each waste, with a cost estimate for capital investment and implementation.
- iii. 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.

D. Cost Allocation System

- i. 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.
- ii. Description of how departments are held accountable for the wastes they generate.
- iii. Comparison of waste management costs with costs of potential reduction and recycling techniques applicable to each waste.

E. 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.

F. Program Evaluation

- i. Description of types and amounts of hazardous waste reduced or recycled.
- ii. Analysis and quantification of progress made relative to each performance goal established and each reduction technique to be implemented.
- iii. Amendments to waste minimization plan and explanation.

- iv. Explanation and documentation of reduction efforts completed or in progress before development of the waste minimization plan.
- v. 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.