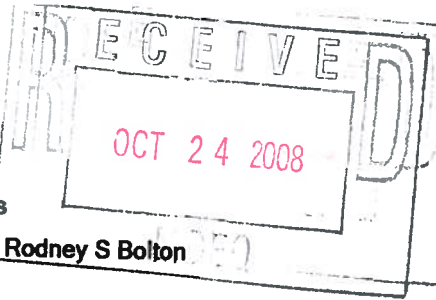




Charles S.  
Jordan/Hattiesburg/NA/Herc  
10/15/2008 11:57 AM

To Carla\_Brown@deq.state.ms.us  
cc Toby\_Cook@deq.state.ms.us Rodney S Bolton  
bcc



Subject Title V Renewal Application - To be Mailed

Hi Carla,

Please find the enclosed Title V Permit Renewal Application.

Also enclosed, I have marked changes, with hi-light, on a copy of our current permit. Please check for accuracy. I've **crossed out(yellow)** what I believe should be removed to reflect current operations and the 502(b)10 notifications submitted since the last modification. I've also added a couple of **sentences(green)** mainly for clarification and better understanding for the plant personnel. If I can provide additional information or answer any additional questions, please call me at 601 466 3048(cell#).

**STATE OF MISSISSIPPI  
AIR POLLUTION CONTROL  
TITLE V PERMIT**

**TO OPERATE AIR EMISSIONS EQUIPMENT**

**THIS CERTIFIES THAT**

**Hercules, Inc.  
613 West 7th Street  
Hattiesburg, Mississippi  
Forrest County**

has been granted permission to operate air emissions equipment in accordance with emission limitations, monitoring requirements and conditions set forth herein. This permit is issued in accordance with Title V of the Federal Clean Air Act (42 U.S.C.A. § 7401 - 7671) and the provisions of the Mississippi Air and Water Pollution Control Law (Section 49-17-1 et. seq., Mississippi Code of 1972), and the regulations and standards adopted and promulgated thereunder.

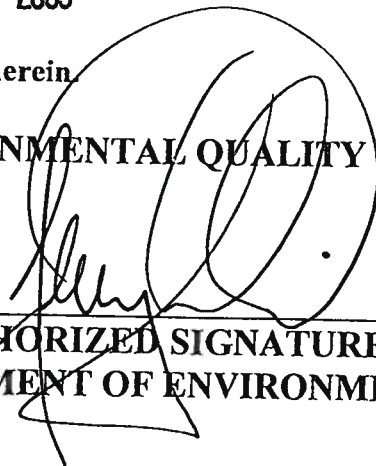
**Permit Issued: April 22, 2004**

**Permit Modified: August 3, 2004**

**Permit Modified: DEC 16 2005**

**Effective Date: As specified herein**

**MISSISSIPPI ENVIRONMENTAL QUALITY PERMIT BOARD**

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

**MISSISSIPPI DEPARTMENT OF ENVIRONMENTAL QUALITY**

**Expires: March 31, 2009**

**Permit No.: 0800-00001**

0800-00001 PER20030001

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## SECTION 1. GENERAL CONDITIONS

- 1.1 The permittee must comply with all conditions of this permit. Any permit noncompliance constitutes a violation of the Federal Act and is grounds for enforcement action; for permit termination, revocation and reissuance, or modification; or for denial of a permit renewal application. (Ref.: APC-S-6, Section III.A.6.a.)
- 1.2 It shall not be a defense for a 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. (Ref.: APC-S-6, Section III.A.6.b.)
- 1.3 This permit and/or any part thereof may be modified, revoked, reopened, and reissued, or terminated for cause. The filing of a request by the permittee for a permit modification, revocation and reissuance, or termination, or of a notification of planned changes or anticipated noncompliance does not stay any permit condition. (Ref.: APC-S-6, Section III.A.6.c.)
- 1.4 This permit does not convey any property rights of any sort, or any exclusive privilege. (Ref.: APC-S-6, Section III.A.6.d.)
- 1.5 The permittee shall furnish to the DEQ within a reasonable time any information the DEQ may request in writing to determine whether cause exists for modifying, revoking and reissuing, or terminating the permit or to determine compliance with the permit. Upon request, the permittee shall also furnish to the DEQ copies of records required to be kept by the permittee or, for information to be confidential, the permittee shall furnish such records to DEQ along with a claim of confidentiality. The permittee may furnish such records directly to the Administrator along with a claim of confidentiality. (Ref.: APC-S-6, Section III.A.6.e.)
- 1.6 The provisions of this permit are severable. If any provision of this permit, or the application of any provision of this permit to any circumstances, is challenged or held invalid, the validity of the remaining permit provisions and/or portions thereof or their application to other persons or sets of circumstances, shall not be affected thereby. (Ref.: APC-S-6, Section III.A.5.)
- 1.7 The permittee shall pay to the DEQ an annual permit fee. The amount of fee shall be determined each year based on the provisions of regulated pollutants for fee purposes and the fee schedule specified in the Commission on Environmental Quality's order which shall be issued in accordance with the procedure outlined in Regulation APC-S-6.
  - (a) For purposes of fee assessment and collection, the permittee shall elect for actual or allowable emissions to be used in determining the annual quantity of emissions unless the Commission determines by order that the method chosen by the applicant for calculating actual emissions fails to reasonably represent actual emissions. Actual emissions shall be calculated using emission monitoring data or direct emissions measurements for the pollutant(s); mass balance calculations such as the amounts of the pollutant(s) entering and leaving process equipment and where mass balance calculations can be supported by direct measurement of process parameters, such

direct measurement data shall be supplied; published emission factors such as those relating release quantities to throughput or equipment type (e.g., air emission factors); or other approaches such as engineering calculations (e.g., estimating volatilization using published mathematical formulas) or best engineering judgements where such judgements are derived from process and/or emission data which supports the estimates of maximum actual emission. (Ref.: APC-S-6, Section VI.A.2.)

- (b) If the Commission determines that there is not sufficient information available on a facility's emissions, the determination of the fee shall be based upon the permitted allowable emissions until such time as an adequate determination of actual emissions is made. Such determination may be made anytime within one year of the submittal of actual emissions data by the permittee. (Ref.: APC-S-6, Section VI.A.2.) If at any time within the year the Commission determines that the information submitted by the permittee on actual emissions is insufficient or incorrect, the permittee will be notified of the deficiencies and the adjusted fee schedule. Past due fees from the adjusted fee schedule will be paid on the next scheduled quarterly payment time. (Ref.: APC-S-6, Section VI.D.2.)
- (c) The fee shall be due September 1 of each year. By July 1 of each year the permittee shall submit an inventory of emissions for the previous year on which the fee is to be assessed. The permittee may elect a quarterly payment method of four (4) equal payments; notification of the election of quarterly payments must be made to the DEQ by the first payment date of September 1. The permittee shall be liable for penalty as prescribed by State Law for failure to pay the fee or quarterly portion thereof by the date due. (Ref.: APC-S-6, Section VI.D.)
- (d) If in disagreement with the calculation or applicability of the Title V permit fee, the permittee may petition the Commission in writing for a hearing in accordance with State Law. Any disputed portion of the fee for which a hearing has been requested will not incur any penalty or interest from and after the receipt by the Commission of the hearing petition. (Ref.: APC-S-6, Section VI.C.)

- 1.8 No permit revision shall be required under any approved economic incentives, marketable permits, emissions trading and other similar programs or processes for changes that are provided for in this permit. (Ref.: APC-S-6, Section III.A.8.)
- 1.9 Any document required by this permit to be submitted to the DEQ shall contain a certification by a responsible official that states that, based on information and belief formed after reasonable inquiry, the statements and information in the document are true, accurate, and complete. (Ref.: APC-S-6, Section II.E.)
- 1.10 The permittee shall allow the DEQ, or an authorized representative, upon the presentation of credentials and other documents as may be required by law, to perform the following:
  - (a) enter upon the permittee's premises where a Title V source is located or emissions-related activity is conducted, or where records must be kept under the conditions of this permit;
  - (b) have access to and copy, at reasonable times, any records that must be kept under the conditions of this permit;
  - (c) inspect at reasonable times any facilities, equipment (including monitoring and air pollution control equipment), practices, or operations regulated or required under the permit; and
  - (d) as authorized by the Federal Act, sample or monitor, at reasonable times, substances or parameters for the purpose of assuring compliance with the permit or applicable requirements. (Ref.: APC-S-6, Section III.C.2.)
- 1.11 Except as otherwise specified or limited herein, the permittee shall have necessary sampling ports and ease of accessibility for any new air pollution control equipment, obtained after May 8, 1970, and vented to the atmosphere. (Ref.: APC-S-1, Section 3.9(a))
- 1.12 Except as otherwise specified or limited herein, the permittee shall provide the necessary sampling ports and ease of accessibility when deemed necessary by the Permit Board for air pollution control equipment that was in existence prior to May 8, 1970. (Ref.: APC-S-1, Section 3.9(b))
- 1.13 Compliance with the conditions of this permit shall be deemed compliance with any applicable requirements as of the date of permit issuance where such applicable requirements are included and are specifically identified in the permit or where the permit contains a determination, or summary thereof, by the Permit Board that requirements specifically identified previously are not applicable to the source. (Ref.: APC-S-6, Section III.F.1.)
- 1.14 Nothing in this permit shall alter or affect the following:
  - (a) the provisions of Section 303 of the Federal Act (emergency orders), including the authority of the Administrator under that section;



- (b) the liability of an owner or operator of a source for any violation of applicable requirements prior to or at the time of permit issuance;
  - (c) the applicable requirements of the acid rain program, consistent with Section 408(a) of the Federal Act.
  - (d) the ability of EPA to obtain information from a source pursuant to Section 114 of the Federal Act. (Ref.: APC-S-6, Section III.F.2.)
- 1.15 The permittee shall comply with the requirement to register a Risk Management Plan if permittee's facility is required pursuant to Section 112(r) of the Act to register such a plan. (Ref.: APC-S-6, Section III.H.)
- 1.16 Expiration of this permit terminates the permittee's right to operate unless a timely and complete renewal application has been submitted. A timely application is one which is submitted at least six (6) months prior to expiration of the Title V permit. If the permittee submits a timely and complete application, the failure to have a Title V permit is not a violation of regulations until the Permit Board takes final action on the permit application. This protection shall cease to apply if, subsequent to the completeness determination, the permittee fails to submit by the deadline specified in writing by the DEQ any additional information identified as being needed to process the application. (Ref.: APC-S-6, Section IV.C.2., Section IV.B., and Section II.A.1.c.)
- 1.17 The permittee is authorized to make changes within their facility without requiring a permit revision (ref: Section 502(b)(10) of the Act) if:
- (a) the changes are not modifications under any provision of Title I of the Act;
  - (b) the changes do not exceed the emissions allowable under this permit;
  - (c) the permittee provides the Administrator and the Department with written notification in advance of the proposed changes (at least seven (7) days, or such other time frame as provided in other regulations for emergencies) and the notification includes:
    - (1) a brief description of the change(s),
    - (2) the date on which the change will occur,
    - (3) any change in emissions, and
    - (4) any permit term or condition that is no longer applicable as a result of the change;
  - (d) the permit shield shall not apply to any Section 502(b)(10) change. (Ref.: APC-S-6, Section IV.F.)

- 1.18 Should the Executive Director of the Mississippi Department of Environmental Quality declare an Air Pollution Emergency Episode, the permittee will be required to operate in accordance with the permittee's previously approved Emissions Reduction Schedule or, in the absence of an approved schedule, with the appropriate requirements specified in Regulation APC-S-3, "Regulations for the Prevention of Air Pollution Emergency Episodes" for the level of emergency declared. (Ref.: APC-S-3)
- 1.19 Except as otherwise provided herein, a modification of the facility may require a Permit to Construct in accordance with the provisions of Regulations APC-S-2, "Permit Regulations for the Construction and/or Operation of Air Emissions Equipment", and may require modification of this permit in accordance with Regulations APC-S-6, "Air Emissions Operating Permit Regulations for the Purposes of Title V of the Federal Clean Air Act". Modification is defined as "[a]ny physical change in or change in the method of operation of a facility which increases the actual emissions or the potential uncontrolled emissions of any air pollutant subject to regulation under the Federal Act emitted into the atmosphere by that facility or which results in the emission of any air pollutant subject to regulation under the Federal Act into the atmosphere not previously emitted. A physical change or change in the method of operation shall not include:
- (a) routine maintenance, repair, and replacement;
  - (b) use of an alternative fuel or raw material by reason of an order under Sections 2 (a) and (b) of the Federal Energy Supply and Environmental Coordination Act of 1974 (or any superseding legislation) or by reason of a natural gas curtailment plan pursuant to the Federal Power Act;
  - (c) use of an alternative fuel by reason of an order or rule under Section 125 of the Federal Act;
  - (d) use of an alternative fuel or raw material by a stationary source which:
    - (1) the source was capable of accommodating before January 6, 1975, unless such change would be prohibited under any federally enforceable permit condition which was established after January 6, 1975, pursuant to 40 CFR 52.21 or under regulations approved pursuant to 40 CFR 51.166; or
    - (2) the source is approved to use under any permit issued under 40 CFR 52.21 or under regulations approved pursuant to 40 CFR 51.166;
  - (e) an increase in the hours of operation or in the production rate unless such change would be prohibited under any federally enforceable permit condition which was established after January 6, 1975, pursuant to 40 CFR 52.21 or under regulations approved pursuant to 40 CFR Subpart I or 40 CFR 51.166; or
  - (f) any change in ownership of the stationary source."



- 1.20 Any change in ownership or operational control must be approved by the Permit Board. (Ref.: APC-S-6, Section IV.D.4.)
- 1.21 This permit is a Federally approved operating permit under Title V of the Federal Clean Air Act as amended in 1990. All terms and conditions, including any designed to limit the source's potential to emit, are enforceable by the Administrator and citizens under the Federal Act as well as the Commission. (Ref.: APC-S-6, Section III.B.1)
- 1.22 Except as otherwise specified or limited herein, the open burning of residential, commercial, institutional, or industrial solid waste, is prohibited. This prohibition does not apply to infrequent burning of agricultural wastes in the field, silvicultural wastes for forest management purposes, land-clearing debris, debris from emergency clean-up operations, and ordnance. Open burning of land-clearing debris must not use starter or auxiliary fuels which cause excessive smoke (rubber tires, plastics, etc.); must not be performed if prohibited by local ordinances; must not cause a traffic hazard; must not take place where there is a High Fire Danger Alert declared by the Mississippi Forestry Commission or Emergency Air Pollution Episode Alert imposed by the Executive Director and must meet the following buffer zones.
  - (a) Open burning without a forced-draft air system must not occur within 500 yards of an occupied dwelling.
  - (b) Open burning utilizing a forced-draft air system on all fires to improve the combustion rate and reduce smoke may be done within 500 yards of but not within 50 yards of an occupied dwelling.
  - (c) Burning must not occur within 500 yards of commercial airport property, private air fields, or marked off-runway aircraft approach corridors unless written approval to conduct burning is secured from the proper airport authority, owner or operator. (Ref.: APC-S-1, Section 3.7)
- 1.23 Except as otherwise specified herein, the permittee shall be subject to the following provision with respect to emergencies.
  - (a) Except as otherwise specified herein, an "emergency" means any situation arising from sudden and reasonably unforeseeable events beyond the control of the source, including acts of God, which situation requires immediate corrective action to restore normal operation, and that causes the source to exceed a technology-based emission limitation under the permit, due to unavoidable increases in emissions attributable to the emergency. An emergency shall not include noncompliance to the extent caused by improperly designed equipment, lack of preventative maintenance, careless or improper operation, or operator error.
  - (b) An emergency constitutes an affirmative defense to an action brought for noncompliance with such technology-based emission limitations if the conditions specified in (c) following are met.

- (c) The affirmative defense of emergency shall be demonstrated through properly signed contemporaneous operating logs, or other relevant evidence that include information as follows:
    - (1) an emergency occurred and that the permittee can identify the cause(s) of the emergency;
    - (2) the permitted facility was at the time being properly operated;
    - (3) during the period of the emergency the permittee took all reasonable steps to minimize levels of emissions that exceeded the emission standards, or other requirements in the permit; and
    - (4) the permittee submitted notice of the emergency to the DEQ within 2 working days of the time when emission limitations were exceeded due to the emergency. This notice must contain a description of the emergency, any steps taken to mitigate emissions, and corrective actions taken.
  - (d) In any enforcement proceeding, the permittee seeking to establish the occurrence of an emergency has the burden of proof.
  - (e) This provision is in addition to any emergency or upset provision contained in any applicable requirement specified elsewhere herein. (Ref.: APC-S-6, Section III.G.)
- 1.24 Except as otherwise specified herein, the permittee shall be subject to the following provisions with respect to upsets, startups, shutdowns and maintenance.
- (a) Upsets (as defined by APC-S-1, Section 2.34)
    - (1) The occurrence of an upset constitutes an affirmative defense to an enforcement action brought for noncompliance with emission standards or other requirements of Applicable Rules and Regulations or any applicable permit if the permittee demonstrates through properly signed contemporaneous operating logs, or other relevant evidence that include information as follows:
      - (i) an upset occurred and that the permittee can identify the cause(s) of the upset;
      - (ii) the source was at the time being properly operated;
      - (iii) during the upset the permittee took all reasonable steps to minimize levels of emissions that exceeded the emission standards, or other requirements of Applicable Rules and Regulations or any applicable permit;
      - (iv) the permittee submitted notice of the upset to the DEQ within 5 working days of the time the upset began; and

- (v) the notice of the upset shall contain a description of the upset, any steps taken to mitigate emissions, and corrective actions taken.
  - (2) In any enforcement proceeding, the permittee seeking to establish the occurrence of an upset has the burden of proof.
  - (3) This provision is in addition to any upset provision contained in any applicable requirement.
- (b) Startups and Shutdowns (as defined by APC-S-1, Sections 2.31 & 2.26)
- (1) Startups and shutdowns are part of normal source operation. Emissions limitations applicable to normal operation apply during startups and shutdowns except as follows:
    - (i) when sudden, unavoidable breakdowns occur during a startup or shutdown, the event may be classified as an upset subject to the requirements above;
    - (ii) when a startup or shutdown is infrequent, the duration of excess emissions is brief in each event, and the design of the source is such that the period of excess emissions cannot be avoided without causing damage to equipment or persons; or
    - (iii) when the emissions standards applicable during a startup or shutdown are defined by other requirements of Applicable Rules and Regulations or any applicable permit.
  - (2) In any enforcement proceeding, the permittee seeking to establish the applicability of any exception during a startup or shutdown has the burden of proof.
  - (3) In the event this startup and shutdown provision conflicts with another applicable requirement, the more stringent requirement shall apply.
- (c) Maintenance.
- (1) Maintenance should be performed during planned shutdown or repair of process equipment such that excess emissions are avoided. Unavoidable maintenance that results in brief periods of excess emissions and that is necessary to prevent or minimize emergency conditions or equipment malfunctions constitutes an affirmative defense to an enforcement action brought for noncompliance with emission standards, or other regulatory requirements if the permittee can demonstrate the following:
    - (i) the permittee can identify the need for the maintenance;

- (ii) the source was at the time being properly operated;
  - (iii) during the maintenance the permittee took all reasonable steps to minimize levels of emissions that exceeded the emission standards, or other requirements of Applicable Rules and Regulations or any applicable permit;
  - (iv) the permittee submitted notice of the maintenance to the DEQ within 5 working days of the time the maintenance began or such other times as allowed by DEQ; and
  - (v) the notice shall contain a description of the maintenance, any steps taken to mitigate emissions, and corrective actions taken.
- (2) In any enforcement proceeding, the permittee seeking to establish the applicability of this section has the burden of proof.
  - (3) In the event this maintenance provision conflicts with another applicable requirement, the more stringent requirement shall apply. (Ref.: APC-S-1, Section 10)

1.25 The permittee shall comply with all applicable standards for demolition and renovation activities pursuant to the requirements of 40 CFR Part 61, Subpart M, as adopted by reference in Regulation APC-S-1, Section 8. The permittee shall not be required to obtain a modification of this permit in order to perform the referenced activities.

SECTION 2. EMISSION POINTS & POLLUTION CONTROL DEVICES

Emission Point	Description
AA-000	The Kymene process area produces specialty chemicals used primarily as wet strength additives in the manufacturing of paper. Equipment in the process area includes reactors, tanks, vents, piping, etc. Emissions occur from associated equipment and from fugitive losses.
AA-001	The Kymene process vent equipped with a packed bed water scrubber.
AA-002	The Kymene adipic acid handling system equipped with a dust shaker.
AB-000	The Paracol/AKD process area produces AKD and wax dispersions used primarily as sizing agents in the manufacturing of paper. Equipment in the process area includes reactors, tanks, vents, piping, etc. Emissions occur from associated equipment and from fugitive losses.
AB-001	The Paracol/AKD process area vent and melter equipped with a water scrubber.
AC-004	The rosin melter.
AD-000	The Neuphor process area produces specialty chemicals used primarily as sizing agents in the manufacturing of paper. Equipment in the process area includes reactors, tanks, vents, piping, etc. Emissions occur from associated equipment and from fugitive losses.
AG-003	The Hard Resins Flaking Process "hot end" vents, equipped with a water scrubber.
AG-005	The Hard Resins Flaking Process "cold end" resins flaking and bagging, equipped with a dust collector.
AM-003	The 24.345 MMBTU/hr package boiler only capable of burning natural gas.
AN-000	The Effluent Treatment process area consists of equalization, solids removal, pH adjustment, and neutralization.



SECTION 3. EMISSION LIMITATIONS & STANDARDS

A. Facility-Wide Emission Limitations & Standards

3.A.1 Except as otherwise specified or limited herein, the permittee shall not cause, permit, or allow the emission of smoke from a point source into the open air from any manufacturing, industrial, commercial or waste disposal process which exceeds forty (40) percent opacity subject to the exceptions provided in (a) & (b).

(a) Startup operations may produce emissions which exceed 40% opacity for up to fifteen (15) minutes per startup in any one hour and not to exceed three (3) startups per stack in any twenty-four (24) hour period.

(b) Emissions resulting from soot blowing operations shall be permitted provided such emissions do not exceed 60 percent opacity, and provided further that the aggregate duration of such emissions during any twenty-four (24) hour period does not exceed ten (10) minutes per billion BTU gross heating value of fuel in any one hour. (Ref.: APC-S-1, Section 3.1)

3.A.2 Except as otherwise specified or limited herein, the permittee shall not cause, allow, or permit the discharge into the ambient air from any point source or emissions, any air contaminant of such opacity as to obscure an observer's view to a degree in excess of 40% opacity, equivalent to that provided in Paragraph 3.A.1. This shall not apply to vision obscuration caused by uncombined water droplets. (Ref.: APC-S-1, Section 3.2)

3.A.3 The permittee shall not cause, allow, or permit emissions of any individual hazardous air pollutant (HAP) in excess of 9.9 tons for any consecutive 12-month period. (Ref.: Title V Operating Permit issued April 22, 2004)

3.A.4 The permittee shall not cause, allow, or permit emissions of total combined hazardous air pollutants (HAPs) in excess of 24.9 tons for any consecutive 12-month period. (Ref.: Title V Operating Permit issued April 22, 2004)

B. Emission Point Specific Emission Limitations & Standards

Emission Point(s)	Applicable Requirement	Condition Number(s)	Pollutant/Parameter	Limit/Standard
AA-000 AA-001 AN-000	APC-S-1, Section 8.1 and MACT Subpart W, 40 CFR 63.524(a)(2)	3.B.1	Total HAPs	Requirements of 40 CFR 63, Subpart H to control emissions from equipment leaks
AA-002	APC-S-1, Section 3.6(a)	3.B.2	PM	E=4.1(p) <sup>0.67</sup>

Emission Point(s)	Applicable Requirement	Condition Number(s)	Pollutant/Parameter	Limit/Standard
AB-001	APC-S-1, Section 3.6(a)	3.B.2	PM	$E=4.1(p)^{0.67}$
AC-004	APC-S-1, Section 3.6(a)	3.B.2	PM	$E=4.1(p)^{0.67}$
AG-005	APC-S-1, Section 3.6(a)	3.B.2	PM	$E=4.1(p)^{0.67}$
AM-003	APC-S-1, Section 3.4(a)(2)	3.B.4	PM	$E=0.8808 * I^{0.1667}$
	APC-S-1, Section 4.1(a)	3.B.3	SO <sub>2</sub>	4.8 lbs/MMBTU
AM-003	Title V Operating Permit Issued	3.B.5	Fuel Restriction	Combustion of natural gas only.

3.B.1 Emission Points AA-000, AA-001, and AN-000, are affected by and shall comply with the National Emission Standards for Hazardous Air Pollutants for Epoxy Resins Production and Non-Nylon Polyamides Production (40 CFR Part 63 Subpart W) and the General Provisions (40 CFR Part 63 Subpart A). A copy of the National Emission Standards for Hazardous Air Pollutants for Epoxy Resins Production and Non-Nylon Polyamides Production is attached in Appendix C.

For Emission Points AA-000, AA-001, and AN-000, the permittee shall comply with the requirements of 40 CFR Part 63 Subpart H to control emissions from equipment leaks. (Ref.: 40 CFR 63.524(a)(2))

3.B.2 The permittee shall not cause, permit, or allow the emission from any manufacturing process, in any one hour from any point source, particulate matter in total quantities in excess of the amount determined by the relationship

$$E = 4.1(p)^{0.67}$$

where E is the emission rate in pounds per hour and P is the process weight input rate in tons per hour. (Ref.: APC-S-1, Section 3.6(a))

3.B.3 The permittee shall not have emissions of sulfur oxides in excess of 4.8 pounds (measured as sulfur dioxide) per million BTU heat input. (Ref.: APC-S-1, Section 4.1(a))

3.B.4 The permittee shall not have particulate emissions that exceed an emission rate as determined by the relationship

$$E = 0.8808 * I^{0.1667}$$

where E is the emission rate in pounds per million BTU per hour heat input and I is the heat input in millions of BTU per hour. (Ref.: APC-S-1, Section 3.4(a)(2))

3.B.5 For Emission Point AM-003, the permittee shall combust only natural gas. (Ref.: Title V Operating Permit issued April 22, 2004)

C. Insignificant and Trivial Activity Emission Limitations & Standards

Applicable Requirement	Condition Number(s)	Pollutant/Parameter	Limit/Standard
APC-S-1, Section 3.4(a)(1)	3.C.1	PM	0.6 lbs/MMBTU, or as otherwise limited by facility modification restrictions
APC-S-1, Section 4.1(a)	3.C.2	SO <sub>2</sub>	4.8 lbs/MMBTU, or as otherwise limited by facility modification restrictions
APC-S-1, Section 3.6(a)	3.C.3	PM	$E=4.1(p)^{0.67}$ , or as otherwise limited by facility modification restrictions

3.C.1 The maximum permissible emission of ash and/or particulate matter from fossil fuel burning installations of less than 10 million BTU per hour heat input shall not exceed 0.6 pounds per million BTU per hour heat input. (Ref.: APC-S-1, Section 3.4(a)(1))

3.C.2 The maximum discharge of sulfur oxides from any fuel burning installation in which the fuel is burned primarily to produce heat or power by indirect heat transfer shall not exceed 4.8 pounds (measured as sulfur dioxide) per million BTU heat input. (Ref: APC-S-1, Section 4.1(a))

3.C.3 The permittee shall not cause, permit, or allow the emission from any manufacturing process, in any one hour from any point source, particulate matter in total quantities in excess of the amount determined by the relationship

$$E = 4.1 (p)^{0.67}$$

where E is the emission rate in pounds per hour and p is the process weight input rate in tons per hour. (Ref.: APC-S-1, Section 3.6(a))

D. Work Practice Standards

Emission Point(s)	Applicable Requirement	Condition Number(s)	Pollutant/Parameter	Limit/Standard
AA-000 AA-001 AN-000	40 CFR 63.6(e)	3.D.1	O & M	Operate and maintain equipment to minimize emissions.
AA-000 AA-001 AN-000	40 CFR 63.6(e)(3)	3.D.2	SSM Plan	Develop and implement written startup, shutdown, and malfunction (SSM) plan

For Emission Point AA-000, if 40 CFR 63, Subpart W or Subpart H, at any time becomes applicable, the permittee shall comply with all applicable requirements.

3.D.1 The permittee shall, at all times including periods of startup, shutdown and malfunctions, operate and maintain Emission Points AA-000, AA-001, and AN-000 in a manner consistent with good air pollution control practices for minimizing emissions at least to the emission levels authorized herein. (Ref.: 40 CFR 63.6(e))

3.D.2 The permittee shall develop and implement a written startup, shutdown, and malfunction plan that describes, in detail, procedures for operating and maintaining Emission Points AA-000 and AA-001 during periods of startup, shutdown, and malfunction and a program of corrective action for the malfunctioning of air pollution equipment authorized herein.

If 40 CFR 63, Subpart W or Subpart H, at any time, becomes applicable to Emission Point AN-000, the permittee shall develop and implement a startup, shutdown, and malfunction plan consistent with the above requirements. (Ref.: 40 CFR 63.6(e)(3))

#### SECTION 4. COMPLIANCE SCHEDULE

- 4.1 Unless otherwise specified herein, the permittee shall be in compliance with all requirements contained herein upon issuance of this permit.
- 4.2 Except as otherwise specified herein, the permittee shall submit to the Permit Board and to the Administrator of EPA Region IV a certification of compliance with permit terms and conditions, including emission limitations, standards, or work practices, by January 31 for the preceding calendar year. Each compliance certification shall include the following:
- (a) the identification of each term or condition of the permit that is the basis of the certification;
  - (b) the compliance status;
  - (c) whether compliance was continuous or intermittent;
  - (d) the method(s) used for determining the compliance status of the source, currently and over the applicable reporting period;
  - (e) such other facts as may be specified as pertinent in specific conditions elsewhere in this permit. (Ref.: APC-S-6, Section III.C.5.a.,c.,&d.)



SECTION 5. MONITORING, RECORDKEEPING & REPORTING  
REQUIREMENTS

A. General Monitoring, Recordkeeping and Reporting Requirements

- 5.A.1 The permittee shall install, maintain, and operate equipment and/or institute procedures as necessary to perform the monitoring and recordkeeping specified below. (Ref.: APC-S-6, Section III.A.3)
- 5.A.2 In addition to the recordkeeping specified below, the permittee shall include with all records of required monitoring information the following:
- (a) the date, place as defined in the permit, and time of sampling or measurements;
  - (b) the date(s) analyses were performed;
  - (c) the company or entity that performed the analyses;
  - (d) the analytical techniques or methods used;
  - (e) the results of such analyses; and
  - (f) the operating conditions existing at the time of sampling or measurement. (Ref.: APC-S-6, Section III.A.3.b.(1)(a)-(f))

- 5.A.3 Except as otherwise specified herein, the permittee shall retain records of all required monitoring data and support information for a period of at least five (5) years from the date of the monitoring sample, measurement, report, or application. Support information includes all calibration and maintenance records, all original strip-chart recordings for continuous monitoring instrumentation, and copies of all reports required by the permit. (Ref.: APC-S-6, Section III.A.3.b.(2))
- 5.A.4 Except as otherwise specified herein, the permittee shall submit reports of any required monitoring by July 31 and January 31 for the preceding six-month period. All instances of deviations from permit requirements must be clearly identified in such reports and all required reports must be certified by a responsible official consistent with APC-S-6, Section II.E. (Ref.: APC-S-6, Section III.A.3.c.(1))
- 5.A.5 Except as otherwise specified herein, the permittee shall report all deviations from permit requirements, including those attributable to upsets, the probable cause of such deviations, and any corrective actions or preventive measures taken. Said report shall be made within five (5) days of the time the deviation began. (Ref.: APC-S-6, Section III.A.3.c.(2))
- 5.A.6 Except as otherwise specified herein, the permittee shall perform emissions sampling and analysis in accordance with EPA Test Methods and with any continuous emission monitoring requirements, if applicable. All test methods shall be those versions or their equivalents approved by the DEQ and the EPA. (Ref.: APC-S-6, Section III.A.3.a.(1))

**B. Specific Monitoring and Recordkeeping Requirements**

Emission Point(s)	Pollutant/Parameter Monitored	Monitoring/Recordkeeping Requirement	Condition Number	Applicable Requirement
AA-000 AA-001 AN-000	HAP	Initial Compliance and Performance Testing	5.B.1	MACT Subpart W, 40 CFR 63.525
AA-000 AA-001 AN-000	HAP	Compliance Monitoring	5.B.2	MACT Subpart W, 40 CFR 63.526
AA-000 AA-001 AN-000	HAP	Recordkeeping Requirements	5.B.3	MACT Subpart W, 40 CFR 63.527
AA-001 AA-002 AB-001 AG-003 AG-005	Control Equipment Maintenance	Monitoring and Recordkeeping Requirements	5.B.4	APC-S-6, Section III.A.3

Emission Point(s)	Pollutant/Parameter Monitored	Monitoring/Recordkeeping Requirement	Condition Number	Applicable Requirement
AM-003	Recordkeeping Requirements	Record of amount of natural gas combusted during each day	5.B.5	NSPS Subpart Dc, 40 CFR 60.48c(g)
AA-002 AB-001	Visible Emissions/ Opacity	Weekly monitoring and recordkeeping of visible emissions	5.B.6	APC-S-6, Section III.A.3
Facility-Wide	Individual and Total HAPs	Calculate and record monthly HAP emissions and total individual and combined HAP emissions for consecutive 12-month period	5.B.7	APC-S-6, Section III.A.3

For Emission Point AA-000, if 40 CFR 63, Subpart W or Subpart H, at any time becomes applicable, the permittee shall comply with all applicable requirements.

- 5.B.1 For Emission Points AA-000, AA-001, and AN-000, when complying with the equipment leak requirements of 3.B.1, the permittee must achieve initial compliance by demonstrating the ability of its specific program to meet the compliance requirements of 40 CFR Part 63, Subpart H. The demonstration of the program to meet the compliance requirements of 40 CFR Part 63, Subpart H are those requirements set forth in 40 CFR 63.162(a) or (b), whichever is applicable. (Ref.: 40 CFR 63.525(i))
- 5.B.2 For Emission Points AA-000, AA-001, and AN-000, the permittee shall perform monitoring by the following method:
- When complying with the equipment leaks requirements of 3.B.1, the permittee shall meet the monitoring requirements spelled out in the applicable sections of 40 CFR Part 63, Subpart H. (Ref.: 40 CFR 63.526(d))
- 5.B.3 For Emission Points AA-000, AA-001, and AN-000, the permittee shall perform the following recordkeeping:
- When complying with the equipment leak provisions stated in 3.B.1, the permittee shall implement the recordkeeping requirements outlined in 40 CFR 63.181. These records shall be retained for a period of 5 years in accordance with the requirements of 40 CFR 63.10(b)(1). (Ref.: 40 CFR 63.527(d))
- 5.B.4 For Emission Points AA-001, AA-002, AB-001, AG-003, and AG-005, the permittee shall perform weekly maintenance checks to ensure proper operation of the pollution control equipment. Records of the inspections and/or maintenance shall be kept in log form and made available for review upon request. The permittee shall also maintain on hand at all times sufficient equipment as is necessary to repair and/or replace the pollution control equipment. (Ref.: APC-S-6, Section III.A.3.a(3))

- 5.B.5 For Emission Point AM-003, the permittee shall record and maintain records of the amount of natural gas combusted each day. (Ref.: 40 CFR 60.48c(g))
- 5.B.6 For Emission Points AA-002 and AB-001, the permittee shall conduct weekly inspections for visible emissions (VE) (one-minute interval). The permittee shall maintain a log noting 1) whether any air emissions (except for water vapor) were visible from the emission point and 2) all emission points from which visible emissions occurred. If no VE are observed then no further observations are required.

For emission points with VE, the permittee shall record 1) the color of the emission, 2) whether the emission was light or heavy, 3) the cause of the emission, and 4) any corrective action taken.

Upon observation of VE from an emission point, the frequency of observation for that emission point shall become daily until no VE is observed for three consecutive days. After three consecutive days of no VE, the inspection frequency may be reduced to weekly. If no VE are observed for three consecutive months of weekly observations, the frequency may be reduced to monthly. However, if VE are observed during a monthly inspection, the frequency of inspection shall revert to the daily then weekly schedule as specified above.

Upon detecting VE, the permittee shall immediately inspect the control device and take appropriate corrective action. Records of VE inspections and any corrective action taken shall be kept in log form and made available for review upon request. (Ref.: APC-S-6, Section III.A.3.a(2))

- 5.B.7 For the entire facility, the permittee shall calculate and record the tons of individual hazardous air pollutant (HAP) emitted each month and the total individual HAP emissions for each consecutive 12-month period. The permittee shall also calculate and record the total combined HAPs emitted for each consecutive 12-month period. (Ref.: APC-S-6, Section III.A.3.a(2))

C. Specific Reporting Requirements

For Emission Point AA-000, if 40 CFR 63, Subpart W or Subpart H, at any time becomes applicable, the permittee shall comply with all applicable requirements.

- 5.C.1 For Emission Point AA-000, AA-001, and AN-000, the permittee shall submit the following reports (Ref.: 40 CFR 63.528):
- When complying with the equipment leak provisions stated in 3.B.1, the permittee shall implement the reporting requirements outlined in 40 CFR 63.182. (Ref.: 40 CFR 63.528(b))
- 5.C.2 The permittee shall submit the written reports of all required stack testing results within forty-five (45) days of the test(s) date. (Ref.: APC-S-6, Section III.A.3.c)
- 5.C.3 For all fuel burning equipment, the permittee shall submit a written report in accordance

with Condition 5.A.4 summarizing the type and quantity of fuel(s) combusted. (Ref.: APC-S-6, Section III.A.3.c(1))

- 5.C.4 For all hazardous air pollutant (HAP) emissions, the permittee shall submit reports of the monthly individual HAP emissions and the individual and combined HAP emissions for each consecutive 12-month period required to be recorded in Condition 5.B.20 above. The reports shall be submitted in accordance with Condition 5.A.4 above. (Ref.: APC-S-6, Section III.A.3.c)
- 5.C.5 For Emission Points AA-002 and AB-001, the permittee shall report any abnormal visible emissions recorded, including the 1) the color of the emission, 2) whether the emission was light or heavy, 3) the cause of the abnormal emission, and 4) any corrective action taken. The reports shall be submitted in accordance with Condition 5.A.4 above. (Ref.: APC-S-6, Section III.A.3.c)



SECTION 6. ALTERNATIVE OPERATING SCENARIOS

6.1 None permitted.

## SECTION 7. TITLE VI REQUIREMENTS

The following are applicable or potentially applicable requirements originating from Title VI of the Clean Air Act. The full text of the referenced regulations is contained in Appendix B to this permit.

- 7.1 If the permittee stores or transports class I or class II substances, the permittee shall comply with the standards for labeling of products using ozone-depleting substances pursuant to 40 CFR Part 82, Subpart E:
- (a) All containers in which a class I or class II substance is stored or transported, all products containing a class I substance, and all products directly manufactured with a class I substance must bear the required warning statement if being introduced into interstate commerce pursuant to § 82.106.
  - (b) The placement of the required warning statement must comply with the requirements pursuant to § 82.108.
  - (c) The form of the label bearing the required warning statement must comply with the requirements pursuant to § 82.110.
  - (d) No person may modify, remove, or interfere with the required warning statement except as described in § 82.112.
- 7.2 If the permittee performs any of the activities described below, the permittee shall comply with the standards for recycling and emissions reduction pursuant to 40 CFR Part 82, Subpart F, except as provided for MVACs in Subpart B:
- (a) Persons opening appliances for maintenance, service, repair, or disposal must comply with the required practices pursuant to § 82.156.
  - (b) Equipment used during the maintenance, service, repair, or disposal of appliance must comply with the standards for recycling and recovery equipment pursuant to § 82.158.
  - (c) Persons performing maintenance, service, repair, or disposal of appliances must be certified by an approved technician certification program pursuant to § 82.161.
  - (d) Persons disposing of small appliances, MVACs, and MVAC-like appliances must comply with the recordkeeping requirements pursuant to § 82.166. ("MVAC - like appliance" is defined at § 82.152.)
  - (e) Persons owning commercial or industrial process refrigeration equipment must comply with the leak repair requirements pursuant to § 82.156.

(f) Owners/operators of appliances normally containing 50 or more pounds of refrigerant must keep records of refrigerant purchased and added to such appliances pursuant to § 82.166.

7.3 If the permittee manufactures, transforms, imports, or exports a class I or class II substance, the permittee is subject to all the requirements as specified in 40 CFR part 82, Subpart A, Production and Consumption Controls.

7.4 If the permittee performs a service on motor (fleet) vehicles and if this service involves an ozone-depleting substance (refrigerant) in the motor vehicle air conditioner (MVAC), the permittee is subject to all the applicable requirements as specified in 40 CFR part 82, Subpart B, Servicing of Motor Vehicle Air Conditioners.

The term "motor vehicle" as used in Subpart B does not include a vehicle in which final assembly of the vehicle has not been completed. The term "MVAC" as used in Subpart B does not include air-tight sealed refrigeration systems used for refrigerated cargo, or air conditioning systems on passenger buses using HCFC-22 refrigerant.

7.5 The permittee shall be allowed to switch from any ozone-depleting substance to any alternative that is listed in the Significant New Alternatives Program (SNAP) promulgated pursuant to 40 CFR part 82, Subpart G, Significant New Alternatives Policy Program.

CHECK NUMBER: 0990451005

CHECK DATE: 09/09/08

Forest

SUPPLIER REFERENCE	PAYOR REFERENCE	INVOICE DATE	INV AMOUNT	DISCOUNT AMOUNT	NET AMOUNT
VEP00003148	51007657452008	07/15/08	50.00	0.00	50.00
AP00005937	51007708972008	07/28/08	502.56	0.00	502.56
TOTALS:			552.56	.00	552.56

4047 0039  
0800-00001

RECEIVED

SEP 15 2008

DEPT. OF ENVIRONMENTAL QUALITY  
ACCOUNTS RECEIVABLE

(Detach Here)

**HERCULES**

Hercules Incorporated  
Hercules Plaza  
1313 North Market Street  
Wilmington, DE 19894-0001

60-160/433

CHECK DATE  
09/09/2008

CHECK NUMBER  
0990451005

PAY...FIVE HUNDRED FIFTY TWO DOLLARS 56 CENTS

TO THE ORDER OF:

MISSISSIPPI DEPARTMENT OF ENVIRONMENTAL QUALITY  
PO BOX 2339  
JACKSON, MS 39225-2339

\$\*\*\*\*\*552.56

THE BANK OF NEW YORK MELLON  
PITTSBURGH, PENNSYLVANIA

⑈0990451005⑈ ⑆043301601⑆ 092⑈7092⑈

**TITLE V AIR PERMIT FEES**

- Quarter Payment       Full Payment       Other
- Title V Air Permit Fees      3479 - 41670 - 4044 - 0
- Penalty on Failure to Pay      3479 - 42350 - 4044 - 0

Signature

Date

Forrest

STATE OF MISSISSIPPI  
DEPARTMENT OF ENVIRONMENTAL QUALITY  
P.O. BOX 2339  
JACKSON, MS 39225

**\*\* INVOICE \*\***  
**\*\* TITLE V AIR OPERATING PERMIT FEE \*\***

HERCULES, INC.  
613 WEST 7TH STREET

INVOICE #: AP-00005937  
DATE: 07-28-2008

HATTIESBURG, MS 39401  
HERCULES INC

**FINANCIAL:**  
MONA VARNER - (601) 961-5572  
ACCOUNTS\_RECEIVABLE@DEQ.STATE.MS.US

CUSTOMER # 0800-00001  
Date Due: 09-01-08

**ENGINEERING:**  
ELLIOTT BICKERSTAFF - (601) 961-5176  
ELLIOTT BICKERSTAFF@DEQ.STATE.MS.US

*Please include Customer # on check made payable to MDEQ*

DESCRIPTION	QTY	UNIT	FEE PER TON
Carbon Monoxide	4	ACT. TONS	0.00
Particulate Matter	4.77	ACT. TONS	36.00
Lead	0	ACT. TONS	36.00
Nitrogen oxides	5.71	ACT. TONS	36.00
Sulfur Dioxide	0.03	ACT. TONS	36.00
VOC	3.45	ACT. TONS	36.00
Other	0	ACT. TONS	36.00
Total reduced sulfur compounds	0	ACT. TONS	36.00
HAP, Total (VOC)	2.55	ACT. TONS	0.00
HAP, Total (NON VOC)	0	ACT. TONS	36.00
CFC/HCFC, Total	0	ACT. TONS	0.00
<b>TOTAL AMOUNT DUE</b>			<b>\$502.56</b>

As per Section 49-17-30 of the MS Code, a minimum fee of \$250 shall be assessed to and collected from the owner or operator of each facility that is required to hold a Title V permit. Also, the maximum emission rate used for calculation of fees for any pollutant is 4,000 tons, with total fees not to exceed \$250,000 per facility. You were billed for actual or allowable emissions based upon the option which you previously indicated.

As specified in Section 49-17-32 of the MS Code, if any part of the Air Operating Permit fee imposed is not paid within 30 days after the due date, a penalty of 10% of the amount due shall at once accrue. If the fee is not paid in full, including any penalty within 60 days the permit may be revoked.

Full payment can be made by September 1st, however, the law does allow quarterly payments if paid as follows: \$125.64 due by 09-01-2008, \$125.64 due by 12-01-2008, \$125.64 due by 03-01-2009, \$125.64 due by 06-01-2009.