

# MAJOR SOURCE OPERATING PERMIT

**PERMITTEE:** CATERPILLAR, INC.  
**FACILITY NAME:**  
**FACILITY NO.:** 503-0089  
**LOCATION:** BAYOU LA BATRE, ALABAMA

*In accordance with and subject to the provisions of the Alabama Air Pollution Control Act of 1971, Ala. Code §§ 22-28-1 to 22-28-23, as amended, the Alabama Environmental Management Act, Ala. Code §§ 22-22A-1 to 22-22A-17, as amended, and rules and regulations adopted there under, and subject further to the conditions set forth in this permit, the Permittee is hereby authorized to construct, install and use the equipment, device or other article described above.*

*Pursuant to the **Clean Air Act of 1990**, all conditions of this permit are federally enforceable by EPA, the Alabama Department of Environmental Management, and citizens in general. Those provisions which are not required under the **Clean Air Act of 1990** are considered to be state permit provisions and are not federally enforceable by EPA and citizens in general. Those provisions are contained in separate sections of this permit.*

**Issuance Date:** September 2, 2019  
**Effective Date:** September 2, 2019  
**Expiration Date:** September 1, 2024

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Alabama Department of Environmental Management

**ENGINE TEST CELL OPERATIONS**

**OPERATING PERMIT SUMMARY NO. 1. .... 13**

## General Permit Provisos

<b>Federally Enforceable Provisos</b>	<b>Regulations</b>
<p><b>1. <u>Transfer</u></b> This permit is not transferable, whether by operation of law or otherwise, either from one location to another, from one piece of equipment to another, or from one person to another, except as provided in Rule 335-3-16-.13(1)(a)5.</p>	Rule 335-3-16-.02(6)
<p><b>2. <u>Renewals</u></b> An application for permit renewal shall be submitted at least six (6) months, but not more than eighteen (18) months, before the date of expiration of this permit. The source for which this permit is issued shall lose its right to operate upon the expiration of this permit unless a timely and complete renewal application has been submitted within the time constraints listed in the previous paragraph.</p>	Rule 335-3-16-.12(2)
<p><b>3. <u>Severability Clause</u></b> The provisions of this permit are declared to be severable and if any section, paragraph, subparagraph, subdivision, clause, or phrase of this permit shall be adjudged to be invalid or unconstitutional by any court of competent jurisdiction, the judgment shall not affect, impair, or invalidate the remainder of this permit, but shall be confined in its operation to the section, paragraph, subparagraph, subdivision, clause, or phrase of this permit that shall be directly involved in the controversy in which such judgment shall have been rendered.</p>	Rule 335-3-16-.05(e)
<p><b>4. <u>Compliance</u></b></p> <p>(a) The permittee shall comply with all conditions of ADEM Admin. Code 335-3. Noncompliance with this permit will constitute a violation of the Clean Air Act of 1990 and ADEM Admin. Code 335-3 and may result in an enforcement action; including but not limited to, permit termination, revocation and reissuance, or modification; or denial of a permit renewal application by the permittee.</p> <p>(b) The permittee shall not use as a defense in an enforcement action that maintaining compliance with conditions of this permit would have required halting or reducing the permitted activity.</p>	Rule 335-3-16-.05(f)
<p><b>5. <u>Termination for Cause</u></b> This permit may be modified, revoked, reopened, and</p>	Rule 335-3-16-.05(h)

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<p>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 will not stay any permit condition.</p>	
<p><b>6. <u>Property Rights</u></b> The issuance of this permit does not convey any property rights of any sort, or any exclusive privilege.</p>	Rule 335-3-16-.05(i)
<p><b>7. <u>Submission of Information</u></b> The permittee must submit to the Department, within 30 days or for such other reasonable time as the Department may set, any information that the Department may request in writing to determine whether cause exists for modifying, revoking and reissuing, or terminating this permit or to determine compliance with this permit. Upon receiving a specific request, the permittee shall also furnish to the Department copies of records required to be kept by this permit.</p>	Rule 335-3-16-.05(j)
<p><b>8. <u>Economic Incentives, Marketable Permits, and Emissions Trading</u></b> 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.</p>	Rule 335-3-16-.05(k)
<p><b>9. <u>Certification of Truth, Accuracy, and Completeness:</u></b> Any application form, report, test data, monitoring data, or compliance certification submitted pursuant to this permit shall contain certification by a responsible official of truth, accuracy, and completeness. This certification shall state that, based on information and belief formed after reasonable inquiry, the statements and information in the document are true, accurate and complete.</p>	Rule 335-3-16-.07(a)
<p><b>10. <u>Inspection and Entry</u></b> Upon presentation of credentials and other documents as may be required by law, the permittee shall allow authorized representatives of the Alabama Department of Environmental Management and EPA to conduct the following: (a) Enter upon the permittee’s premises where a source is located or emissions-related activity is conducted, or where records must be kept pursuant to the conditions of this permit;</p>	Rule 335-3-16-.07(b)

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<ul style="list-style-type: none"> <li>(b) Review and/or copy, at reasonable times, any records that must be kept pursuant to the conditions of this permit;</li> <li>(c) Inspect, at reasonable times, this facility's equipment (including monitoring equipment and air pollution control equipment), practices, or operations regulated or required pursuant to this permit;</li> <li>(d) Sample or monitor, at reasonable times, substances or parameters for the purpose of assuring compliance with this permit or other applicable requirements.</li> </ul>	
<p><b>11. <u>Compliance Provisions</u></b></p> <ul style="list-style-type: none"> <li>(a) The permittee shall continue to comply with the applicable requirements with which the company has certified that it is already in compliance.</li> <li>(b) The permittee shall comply in a timely manner with applicable requirements that become effective during the term of this permit.</li> </ul>	<p>Rule 335-3-16-.07(c)</p>
<p><b>12. <u>Compliance Certification</u></b></p> <p>A compliance certification shall be submitted annually within 60 days of the anniversary date of issuance of this permit.</p> <ul style="list-style-type: none"> <li>(a) The compliance certification shall include the following: <ul style="list-style-type: none"> <li>(1) The identification of each term or condition of this permit that is the basis of the certification;</li> <li>(2) The compliance status;</li> <li>(3) The method(s) used for determining the compliance status of the source, currently and over the reporting period consistent with Rule 335-3-16-.05(c) (Monitoring and Recordkeeping Requirements);</li> <li>(4) Whether compliance has been continuous or intermittent;</li> <li>(5) Such other facts as the Department may require to determine the compliance status of the source;</li> </ul> </li> <li>(b) The compliance certification shall be submitted to:</li> </ul> <p align="center">Alabama Department of Environmental Management Air Division P.O. Box 301463 Montgomery, AL 36130-1463</p>	<p>Rule 335-3-16-.07(e)</p>

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<p align="center">and to:</p> <p align="center">Air Enforcement and TOXICS Branch EPA Region 4 61 Forsyth Street, SW Atlanta, GA 30303</p>	
<p><b>13. <u>Reopening for Cause</u></b> Under any of the following circumstances, this permit will be reopened prior to the expiration of the permit:</p> <ul style="list-style-type: none"> <li>(a) Additional applicable requirements under the Clean Air Act of 1990 become applicable to the permittee with a remaining permit term of three (3) or more years. Such a reopening shall be completed not later than eighteen (18) months after promulgation of the applicable requirement. No such reopening is required if the effective date of the requirement is later than the date on which this permit is due to expire.</li> <li>(b) Additional requirements (including excess emissions requirements) become applicable to an affected source under the acid rain program. Upon approval by the Administrator, excess emissions offset plans shall be deemed to be incorporated into this permit.</li> <li>(c) The Department or EPA determines that this permit contains a material mistake or that inaccurate statements were made in establishing the emissions standards or other terms or conditions of this permit.</li> <li>(d) The Administrator or the Department determines that this permit must be revised or revoked to assure compliance with the applicable requirements.</li> </ul>	<p>Rule 335-3-16-.13(5)</p>
<p><b>14. <u>Additional Rules and Regulations</u></b> This permit is issued on the basis of Rules and Regulations existing on the date of issuance. In the event additional Rules and Regulations are adopted, it shall be the permit holder's responsibility to comply with such rules.</p>	<p>§22-28-16(d), Code of Alabama 1975, as amended</p>
<p><b>15. <u>Equipment Maintenance or Breakdown</u></b></p> <ul style="list-style-type: none"> <li>(a) In the case of shutdown of air pollution control equipment (which operates pursuant to any permit issued by the Director) for necessary scheduled maintenance, the intent to shut down such equipment shall be reported to the Director</li> </ul>	<p>Rule 335-3-1-.07(1), (2)</p>

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<p>at least twenty-four (24) hours prior to the planned shutdown, unless such shutdown is accompanied by the shutdown of the source which such equipment is intended to control. Such prior notice shall include, but is not limited to the following:</p> <ol style="list-style-type: none"> <li>(1) Identification of the specific facility to be taken out of service as well as its location and permit number;</li> <li>(2) The expected length of time that the air pollution control equipment will be out of service;</li> <li>(3) The nature and quantity of emissions of air contaminants likely to occur during the shutdown period;</li> <li>(4) Measures such as the use of off-shift labor and equipment that will be taken to minimize the length of the shutdown period;</li> <li>(5) The reasons that it would be impossible or impractical to shut down the source operation during the maintenance period.</li> </ol> <p>(b) In the event that there is a breakdown of equipment or upset of process in such a manner as to cause, or is expected to cause, increased emissions of air contaminants which are above an applicable standard, the person responsible for such equipment shall notify the Director within 24 hours or the next working day and provide a statement giving all pertinent facts, including the estimated duration of the breakdown. The Director shall be notified when the breakdown has been corrected.</p>	
<p><b>16. <u>Operation of Capture and Control Devices</u></b> All air pollution control devices and capture systems for which this permit is issued shall be maintained and operated at all times in a manner so as to minimize the emissions of air contaminants. Procedures for ensuring that the above equipment is properly operated and maintained so as to minimize the emission of air contaminants shall be established.</p>	<p>§22-28-16(d), Code of Alabama 1975, as amended</p>
<p><b>17. <u>Obnoxious Odors</u></b> This permit is issued with the condition that, should obnoxious odors arising from the plant operations be verified by Air Division inspectors, measures to abate</p>	<p>Rule 335-3-1-.08</p>

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<p>the odorous emissions shall be taken upon a determination by the Alabama Department of Environmental Management that these measures are technically and economically feasible.</p> <p><b>18. <u>Fugitive Dust</u></b></p> <p>(a) Precautions shall be taken to prevent fugitive dust emanating from plant roads, grounds, stockpiles, screens, dryers, hoppers, ductwork, etc.</p> <p>(b) Plant or haul roads and grounds will be maintained in the following manner so that dust will not become airborne. A minimum of one, or a combination, of the following methods shall be utilized to minimize airborne dust from plant or haul roads and grounds:</p> <p>(1) By the application of water any time the surface of the road is sufficiently dry to allow the creation of dust emissions by the act of wind or vehicular traffic;</p> <p>(2) By reducing the speed of vehicular traffic to a point below that at which dust emissions are created;</p> <p>(3) By paving;</p> <p>(4) By the application of binders to the road surface at any time the road surface is found to allow the creation of dust emissions;</p> <p>Should one, or a combination, of the above methods fail to adequately reduce airborne dust from plant or haul roads and grounds, alternative methods shall be employed, either exclusively or in combination with one or all of the above control techniques, so that dust will not become airborne. Alternative methods shall be approved by the Department prior to utilization.</p>	<p>Rule 335-3-4-.02</p>
<p><b>19. <u>Additions and Revisions</u></b></p> <p>Any modifications to this source shall comply with the modification procedures in Rules 335-3-16-.13 or 335-3-16-.14.</p>	<p>Rule 335-3-16-.13 and .14</p>
<p><b>20. <u>Recordkeeping Requirements</u></b></p> <p>(a) Records of required monitoring information of the source shall include the following:</p> <p>(1) The date, place, and time of all sampling or measurements;</p> <p>(2) The date analyses were performed;</p> <p>(3) The company or entity that performed the</p>	<p>Rule 335-3-16-.05(c)2.</p>



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<p>analyses;</p> <p>(4) The analytical techniques or methods used;</p> <p>(5) The results of all analyses; and</p> <p>(6) The operating conditions that existed at the time of sampling or measurement.</p> <p>(b) Retention of records of all required monitoring data and support information of the source for a period of at least 5 years from the date of the monitoring sample, measurement, report, or application. Support information includes all calibration and maintenance records and all original strip-chart recordings for continuous monitoring instrumentation and copies of all reports required by the permit</p>	
<p><b>21. <u>Reporting Requirements</u></b></p> <p>(a) Reports to the Department of any required monitoring shall be submitted at least every 6 months. All instances of deviations from permit requirements must be clearly identified in said reports. All required reports must be certified by a responsible official consistent with Rule 335-3-16-.04(9).</p> <p>(b) Deviations from permit requirements shall be reported within 48 hours or 2 working day of such deviations, including those attributable to upset conditions as defined in the permit. The report will include the probable cause of said deviations, and any corrective actions or preventive measures that were taken.</p>	<p>Rule 335-3-16-.05(c)3.</p>
<p><b>22. <u>Emission Testing Requirements</u></b></p> <p>Each point of emission which requires testing will be provided with sampling ports, ladders, platforms, and other safety equipment to facilitate testing performed in accordance with procedures established by Part 60 of Title 40 of the Code of Federal Regulations, as the same may be amended or revised.</p> <p>The Air Division must be notified in writing at least 10 days in advance of all emission tests to be conducted and submitted as proof of compliance with the Department's air pollution control rules and regulations.</p> <p>To avoid problems concerning testing methods and procedures, the following shall be included with the notification letter:</p> <p>(1) The date the test crew is expected to arrive, the</p>	<p>Rule 335-3-1-.05(3) and Rule 335-3-1-.04(1)</p> <p>Rule 335-3-1-.04</p>

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<p>date and time anticipated of the start of the first run, how many and which sources are to be tested, and the names of the persons and/or testing company that will conduct the tests.</p> <p>(2) A complete description of each sampling train to be used, including type of media used in determining gas stream components, type of probe lining, type of filter media, and probe cleaning method and solvent to be used (if test procedures require probe cleaning).</p> <p>(3) A description of the process(es) to be tested including the feed rate, any operating parameters used to control or influence the operations, and the rated capacity.</p> <p>(4) A sketch or sketches showing sampling point locations and their relative positions to the nearest upstream and downstream gas flow disturbances.</p> <p>A pretest meeting may be held at the request of the source owner or the Air Division. The necessity for such a meeting and the required attendees will be determined on a case-by-case basis.</p> <p>All test reports must be submitted to the Air Division within 30 days of the actual completion of the test unless an extension of time is specifically approved by the Air Division.</p>	<p>Rule 335-3-1-.04</p>
<p><b>23. <u>Payment of Emission Fees</u></b></p> <p>Annual emission fees shall be remitted each year according to the fee schedule in ADEM Admin. Code R. 335-1-7-.04.</p>	<p>Rule 335-1-7-.04</p>
<p><b>24. <u>Other Reporting and Testing Requirements</u></b></p> <p>Submission of other reports regarding monitoring records, fuel analyses, operating rates, and equipment malfunctions may be required as authorized in the Department's air pollution control rules and regulations. The Department may require emission testing at any time.</p>	<p>Rule 335-3-1-.04(1)</p>
<p><b>25. <u>Title VI Requirements (Refrigerants)</u></b></p> <p>Any facility having appliances or refrigeration equipment, including air conditioning equipment, which use Class I or Class II ozone-depleting substances as listed in 40 CFR Part 82, Subpart A, Appendices A and B, shall service, repair, and maintain such equipment according to the work practices, personnel certification requirements, and certified</p>	<p>335-3-16-.05(a)</p>

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<p>recycling and recovery equipment specified in 40 CFR Part 82, Subpart F.</p> <p>No person shall knowingly vent or otherwise release any Class I or Class II substance into the environment during the repair, servicing, maintenance, or disposal of any device except as provided in 40 CFR Part 82, Subpart F.</p> <p>The responsible official shall comply with all reporting and recordkeeping requirements of 40 CFR 82.166. Reports shall be submitted to the US EPA and the Department as required.</p>	
<p><b>26. <u>Chemical Accidental Prevention Provisions</u></b></p> <p>If a chemical listed in Table 1 of 40 CFR Part 68.130 is present in a process in quantities greater than the threshold quantity listed in Table 1, then:</p> <p>(a) The owner or operator shall comply with the provisions in 40 CFR Part 68.</p> <p>(b) The owner or operator shall submit one of the following:</p> <p>(1) A compliance schedule for meeting the requirements of 40 CFR Part 68 by the date provided in 40 CFR Part 68 § 68.10(a) or,</p> <p>(2) A certification statement that the source is in compliance with all requirements of 40 CFR Part 68, including the registration and submission of the Risk Management Plan.</p>	40 CFR Part 68
<p><b>27. <u>Display of Permit</u></b></p> <p>This permit shall be kept under file or on display at all times at the site where the facility for which the permit is issued is located and will be made readily available for inspection by any or all persons who may request to see it.</p>	Rule 335-3-14-.01(1)(d)
<p><b>28. <u>Circumvention</u></b></p> <p>No person shall cause or permit the installation or use of any device or any means which, without resulting in reduction in the total amount of air contaminant emitted, conceals or dilutes any emission of air contaminant which would otherwise violate the Division 3 rules and regulations.</p>	Rule 335-3-1-.10
<p><b>29. <u>Visible Emissions</u></b></p> <p>Unless otherwise specified in the Unit Specific provisos of this permit, any source of particulate emissions shall not discharge more than one 6-minute average opacity greater than 20% in any 60-minute period. At no time shall any source discharge a 6-minute average opacity</p>	Rule 335-3-4-.01(1)

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<p>of particulate emissions greater than 40%. Opacity will be determined by 40 CFR Part 60, Appendix A, Method 9, unless otherwise specified in the Unit Specific provisos of this permit.</p>	
<p><b>30. <u>Fuel-Burning Equipment</u></b></p> <p>(a) Unless otherwise specified in the Unit Specific provisos of this permit, no fuel-burning equipment may discharge particulate emissions in excess of the emissions specified in Part 335-3-4-.03.</p> <p>(b) Unless otherwise specified in the Unit Specific provisos of this permit, no fuel-burning equipment may discharge sulfur dioxide emissions in excess of the emissions specified in Part 335-3-5-.01.</p>	<p>Rule 335-3-4-.03</p> <p>Rule 335-3-5-.01</p>
<p><b>31. <u>Process Industries – General</u></b></p> <p>Unless otherwise specified in the Unit Specific provisos of this permit, no process may discharge particulate emissions in excess of the emissions specified in Part 335-3-4-.04.</p>	<p>Rule 335-3-4-.04</p>
<p><b>32. <u>Averaging Time for Emission Limits</u></b></p> <p>Unless otherwise specified in the permit, the averaging time for the emission limits listed in this permit shall be the nominal time required by the specific test method.</p>	<p>Rule 335-3-1-.05</p>

## Operating Permit Summary No. 1.

**Emission Unit(s):** Engine Test Stand Nos. S-1, S-2, S-3, S-4  
**Designation No(s). in Application:** 001  
**Description:** Engine Test Stand No s. S-1, S-2, S-3, S-4

**Type and quantity of fuel used:**

Primary: Diesel  
 Secondary: Natural Gas

**Pollutants Emitted:**

Pollutant	Regulatory Emission Limit	Applicable Standard
Opacity	Only one 6-minute average opacity greater than 20% in a 60-minute period; No 6-minute average opacity greater than 40%	SIP
VOC	None	None
SO <sub>2</sub>	1,750,000 gallons of diesel fuel per rolling 12 month total/ 15 ppm sulfur content	PSD Synthetic Minor Limitation
NO <sub>x</sub>	1,750,000 gallons of diesel fuel per rolling 12 month total	PSD Synthetic Minor Limitation
CO	1,750,000 gallons of diesel fuel per rolling 12 month total	PSD Synthetic Minor Limitation
SO <sub>2</sub>	13,500,000 cubic feet of natural gas fuel per rolling 12 month total	PSD Synthetic Minor Limitation
NO <sub>x</sub>	13,500,000 cubic feet of natural gas fuel per rolling 12 month total	PSD Synthetic Minor Limitation
CO	13,500,000 cubic feet of natural gas fuel per rolling 12 month total	PSD Synthetic Minor Limitation

## Unit Specific Provisos

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<i>Section 1--Applicability</i>	
1. This source is subject to a PSD synthetic minor emission limitation.	ADEM Admin. Code R. 335-3-14-.01
2. This unit is subject to the opacity emission rate limits.	ADEM Admin. Code R. 335-3-4-.01
<i>Section 2--Emission Standards</i>	
1. This unit shall not discharge into the atmosphere more than one six (6) minute average opacity greater than 20 percent (20%) in any 60-minute period. At no time shall this unit discharge a six (6) minute average opacity of greater than 40 percent (40%).	ADEM Admin. Code R. 335-3-4-.01
2. This facility shall not fire more than 1,750,000 (one million seven hundred fifty thousand) gallons of diesel fuel during any consecutive twelve (12) month rolling period. This facility shall fire diesel fuel only with a maximum sulfur content of 15 PPM.	ADEM Admin. Code R. 335-3-14-.04(8)
3. This facility shall not fire more than 13,500,000 (thirteen million five hundred thousand) cubic feet of natural gas during any consecutive twelve (12) month rolling period.	ADEM Admin. Code R. 335-3-14-.04(8)
<i>Section 3--Compliance and Performance Test Methods and Procedures</i>	
1. Method 9 as defined in 40 CFR 60, Appendix A or other method approved by the Department shall be used in the determination of the opacity of the stack emissions.	ADEM Admin. Code R. 335-3-1-.05
2. Method 5 as defined in 40 CFR 60, Appendix A or other method approved by the Department shall be used in the determination of particulate emissions from the stack.	ADEM Admin. Code R. 335-3-1-.05

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3. The fuel oil sulfur content shall be as measured by procedures found in ASTM D129-64 (Reapproved 1978). The fuel oil sample to be tested for sulfur content shall be collected in accordance with ASTM D4177-82 or ASTM D4057-81.

ADEM Admin. Code  
R. 335-3-1-.05

*Section 4--Emission Monitoring*

1. This Source is subject to no additional specific requirements other than those listed in the General Permit Provisos.

*Section 5--Recordkeeping and Reporting Requirements*

1. In order to assure compliance with provisos No. 2.2 and No. 2.3, the monthly diesel fuel usage and natural gas usage shall be monitored and recorded. Records of monthly fuel usage must be kept in a permanent form suitable for inspection. The records shall be retained for at least five (5) years from the date of generation and available upon request. A monthly diesel fuel usage and natural gas usage report shall be submitted for each calendar quarter by the 15<sup>th</sup> day of the month following the end of the quarter, in a format approved by the Department in advance. If the 12 month rolling fuel oil usage or natural gas usage exceeds this facility's limit, then ADEM-Air Division shall be notified in writing within 10 days of the exceedance.

ADEM Admin. Code  
R. 335-3-1-.04

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2. This facility keep proof of fuel oil sulfur content as supplied by the manufacturer of the oil or from the facility's own testing. Accurate and understandable records of oil usage and sulfur content must be kept in permanent form suitable for inspection. The records shall be retained for at least five years and made available immediately upon request. If the sulfur content exceeds this limit, then ADEM-Air Division shall be notified in writing within 10 days of the exceedance.

ADEM Admin. Code  
R. 335-3-1-.04