



MAJOR SOURCE OPERATING PERMIT

Permittee: **Alabama Power Company**
Facility Name: **Theodore Cogeneration Plant**
Facility No.: 503-8073
Location: Theodore, Mobile County, 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: *TBD*
Effective Date: *TBD*
Expiration Date: *March 31, 2026*

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<p>1. <u>Transfer</u></p> <p>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>2. <u>Renewals</u></p> <p>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.</p> <p>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>3. <u>Severability Clause</u></p> <p>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, subdivisions, 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>4. <u>Compliance</u></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>	<p>Rule 335-3-16-.05(f)</p> <p>Rule 335-3-16-.05(g)</p>

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<p>5. <u>Termination for Cause</u></p> <p>This permit 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 will not stay any permit condition.</p>	Rule 335-3-16-.05(h)
<p>6. <u>Property Rights</u></p> <p>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>7. <u>Submission of Information</u></p> <p>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>8. <u>Economic Incentives, Marketable Permits, and Emissions Trading</u></p> <p>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>9. <u>Certification of Truth, Accuracy, and Completeness:</u></p> <p>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>10. <u>Inspection and Entry</u></p> <p>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</p>	Rule 335-3-16-.07(b)

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<p>Management and EPA to conduct the following:</p> <ul style="list-style-type: none"> (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; (b) Review and/or copy, at reasonable times, any records that must be kept pursuant to the conditions of this permit; (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; (d) Sample or monitor, at reasonable times, substances or parameters for the purpose of assuring compliance with this permit or other applicable requirements. 	
<p>11. <u>Compliance Provisions</u></p> <ul style="list-style-type: none"> (a) The permittee shall continue to comply with the applicable requirements with which the company has certified that it is already in compliance. (b) The permittee shall comply in a timely manner with applicable requirements that become effective during the term of this permit. 	<p>Rule 335-3-16-.07(c)</p>
<p>12. <u>Compliance Certification</u></p> <p>A compliance certification shall be submitted yearly by November 30 covering the period from October 1 through September 30 unless more frequent periods are specified according to the specific rule governing the source or required by the Department.</p> <ul style="list-style-type: none"> (a) The compliance certification shall include the following: <ul style="list-style-type: none"> (1) The identification of each term or condition of this permit that is the basis of the certification; (2) The compliance status; (3) The method(s) used for determining the compliance 	<p>Rule 335-3-16-.07(e)</p>

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<p>status of the source, currently and over the reporting period consistent with Rule 335-3-16-.05(c) (Monitoring and Recordkeeping Requirements);</p> <p>(4) Whether the method(s) or other means used to assure compliance provided continuous or intermittent data;</p> <p>(5) Such other facts as the Department may require to determine the compliance status of the source;</p> <p>(b) The compliance certification shall be submitted to:</p> <p style="text-align: center;">Alabama Department of Environmental Management Air Division P.O. Box 301463 Montgomery, AL 36130-1463</p> <p style="text-align: center;">and to:</p> <p style="text-align: center;">Enforcement and Compliance Assurance Division EPA Region 4 Atlanta Federal Center 61 Forsyth Street, SW Atlanta, GA 30303</p>	
<p>13. <u>Reopening for Cause</u></p> <p>Under any of the following circumstances, this permit will be reopened prior to the expiration of the permit:</p> <p>(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.</p> <p>(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.</p>	<p>Rule 335-3-16-.13(5)</p>

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<p>(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.</p> <p>(d) The Administrator or the Department determines that this permit must be revised or revoked to assure compliance with the applicable requirements.</p>	
<p>14. <u>Additional Rules and Regulations</u></p> <p>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), <u>Code of Alabama 1975</u>, as amended</p>
<p>15. <u>Equipment Maintenance or Breakdown</u></p> <p>(a) Unless otherwise specified in the unit-specific provisos of this permit, 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 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"> (1) Identification of the specific facility to be taken out of service as well as its location and permit number; (2) The expected length of time that the air pollution control equipment will be out of service; (3) The nature and quantity of emissions of air contaminants likely to occur during the shutdown period; (4) Measures such as the use of off-shift labor and equipment that will be taken to minimize the length of the shutdown period; (5) The reasons that it would be impossible or impractical to shut down the source operation 	<p>Rule 335-3-1-.07(1),(2)</p>

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<p>during the maintenance period.</p>	
<p>(b) Unless otherwise specified in the unit-specific provisos of this permit, 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 will be notified when the breakdown has been corrected.</p>	
<p>16. <u>Operation of Capture and Control Devices</u></p> <p>Unless otherwise specified in the unit-specific provisos of this permit, 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), <u>Code of Alabama 1975</u>, as amended</p>
<p>17. <u>Obnoxious Odors</u></p> <p>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 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>Rule 335-3-1-.08</p>
<p>18. <u>Fugitive Dust</u></p> <p>(a) Reasonable 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:</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</p>	<p>Rule 335-3-4-.02</p>

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<p style="padding-left: 40px;">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; or</p> <p>(5) By any combination of the above methods which results in the prevention of dust becoming airborne from the road surface.</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>19. <u>Additions and Revisions</u></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>20. <u>Recordkeeping Requirements</u></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 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</p>	<p>Rule 335-3-16-.13 and .14</p> <p>Rule 335-3-16-.05(c)(2)</p>

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of sampling or measurement.	
<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>21. <u>Reporting Requirements</u></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 days 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>22. <u>Emission Testing Requirements</u></p> <p>(a) 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>(b) 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>(c) 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 date and time anticipated of the start of the first run, how many and which sources are to be</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>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 requires 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>(d) 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>(e) 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>23. <u>Payment of Emission Fees</u></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>24. <u>Other Reporting and Testing Requirements</u></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>25. <u>Title VI Requirements (Refrigerants)</u></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</p>	<p>40 CFR Part 82</p>

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<p>82, Subpart A, Appendices A and B, shall service, repair, and maintain such equipment according to the work practices, personnel certification requirements, and certified 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>26. <u>Chemical Accidental Prevention Provisions</u></p> <p>If a chemical listed in Table 1 of 40 CFR 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 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>27. <u>Display of Permit</u></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 make the permit readily available for inspection by any or all persons who may request to see it.</p>	Rule 335-3-14-.01(1)(d)
<p>28. <u>Circumvention</u></p> <p>No person shall cause or permit the installation or use of any device or any means which, without resulting in the reduction in the total amount of air contaminant emitted, conceals or</p>	Rule 335-3-1-.10

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<p>dilutes any emission of air contaminant which would otherwise violate the Division 3 rules and regulations.</p>	
<p>29. <u>Visible Emissions</u></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 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>Rule 335-3-4-.01(1)</p>
<p>30. <u>Fuel-Burning Equipment</u></p> <p>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 Rule 335-3-4-.03.</p> <p>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 Rule 335-3-5-.01.</p>	<p>Rule 335-3-4-.03</p> <p>Rule 335-3-5-.01</p>
<p>31. <u>Process Industries – General</u></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 Rule 335-3-4-.04.</p>	<p>Rule 335-3-4-.04</p>
<p>32. <u>Averaging Time for Emission Limits</u></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>
<p>33. <u>Compliance Assurance Monitoring (CAM)</u></p> <p>Conditions (a) through (d) that follow are general conditions applicable to emissions units that are subject to the CAM requirements. Specific requirements related to each emissions unit are contained in the unit specific provisos and the attached CAM appendices.</p> <p>(a) Operation of Approved Monitoring</p>	<p>40 CFR 64.7</p>

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<p>(1) Commencement of operation. The owner or operator shall conduct the monitoring required under this section and detailed in the unit specific provisos and CAM appendix of this permit (if required) upon issuance of the permit, or by such later date specified in the permit pursuant to §64.6(d).</p> <p>(2) Proper maintenance. At all times, the owner or operator shall maintain the monitoring, including but not limited to, maintaining necessary parts for routine repairs of the monitoring equipment.</p> <p>(3) Continued operation. Except for, as applicable, monitoring malfunctions, associated repairs, and required quality assurance or control activities (including, as applicable, calibration checks and required zero and span adjustments), the owner or operator shall conduct all monitoring in continuous operation (or shall collect data at all required intervals) at all times that the pollutant-specific emissions unit is operating. Data recorded during monitoring malfunctions, associated repairs, and required quality assurance or control activities shall not be used for purposes of this part, including data averages and calculations, or fulfilling a minimum data availability requirement, if applicable. The owner or operator shall use all the data collected during all other periods in assessing the operation of the control device and associated control system. A monitoring malfunction is any sudden, infrequent, not reasonably preventable failure of the monitoring to provide valid data. Monitoring failures that are caused in part by poor maintenance or careless operation are not malfunctions.</p> <p>(4) Response to excursions or exceedances.</p> <p style="padding-left: 40px;">(a) Upon detecting an excursion or exceedance, the owner or operator shall restore operation of the pollutant-specific emissions unit (including the control device and associated capture system) to its normal or usual manner of operation as expeditiously as</p>	

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<p>practicable in accordance with good air pollution control practices for minimizing emissions. The response shall include minimizing the period of any startup, shutdown or malfunction and taking any necessary corrective actions to restore normal operation and prevent the likely recurrence of the cause of an excursion or exceedance (other than those caused by excused startup or shutdown conditions). Such actions may include initial inspection and evaluation, recording that operations returned to normal without operator action (such as through response by a computerized distribution control system), or any necessary follow-up actions to return operation to within the indicator range, designated condition, or below the applicable emission limitation or standard, as applicable.</p> <p>(b) Determination of whether the owner or operator has used acceptable procedures in response to an excursion or exceedance will be based on information available, which may include but is not limited to, monitoring results, review of operation and maintenance procedures and records, and inspection of the control device, associated capture system, and the process.</p> <p>(5) Documentation of need for improved monitoring. After approval of monitoring under this part, if the owner or operator identifies a failure to achieve compliance with an emission limitation or standard for which the approved monitoring did not provide an indication of an excursion or exceedance while providing valid data, or the results of compliance or performance testing document a need to modify the existing indicator ranges or designated conditions, the owner or operator shall promptly notify the Department and, if necessary, submit a proposed modification to the permit to address the necessary monitoring changes. Such a modification may include, but is not limited to, reestablishing indicator ranges or designated conditions, modifying the frequency of conducting monitoring and collecting data, or the</p>	

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<p style="text-align: center;">monitoring of additional parameters.</p> <p>(b) Quality Improvement Plan (QIP) Requirements</p> <p>(1) Based on the results of a determination made under Section 33(a)(4)(b) above, the Administrator or the permitting authority may require the owner or operator to develop and implement a QIP. Consistent with 40 CFR §64.6(c)(3), the permit may specify an appropriate threshold, such as an accumulation of exceedances or excursions exceeding 5 percent duration of a pollutant-specific emissions unit's operating time for a reporting period, for requiring the implementation of a QIP. The threshold may be set at a higher or lower percent or may rely on other criteria for purposes of indicating whether a pollutant-specific emissions unit is being maintained and operated in a manner consistent with good air pollution control practices.</p> <p>(2) Elements of a QIP:</p> <p>A. The owner or operator shall maintain a written QIP, if required, and have it available for inspection.</p> <p>B. The plan initially shall include procedures for evaluating the control performance problems and, based on the results of the evaluation procedures, the owner or operator shall modify the plan to include procedures for conducting one or more of the following actions, as appropriate:</p> <p style="padding-left: 40px;">(i) Improved preventive maintenance practices.</p> <p style="padding-left: 40px;">(ii) Process operation changes.</p> <p style="padding-left: 40px;">(iii) Appropriate improvements to control methods.</p> <p style="padding-left: 40px;">(iv) Other steps appropriate to correct control performance.</p> <p style="padding-left: 40px;">(v) More frequent or improved monitoring (only in conjunction with one or more steps</p>	<p>40 CFR 64.8</p>

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<p style="text-align: center;">under paragraphs (2)(b)(i) through (iv) above).</p> <p>(3) If a QIP is required, the owner or operator shall develop and implement a QIP as expeditiously as practicable and shall notify the Department if the period for completing the improvements contained in the QIP exceeds 180 days from the date on which the need to implement the QIP was determined.</p> <p>(4) Following implementation of a QIP, upon any subsequent determination pursuant to Section 33(a)(4)(b) above, the Department may require that an owner or operator make reasonable changes to the QIP if the QIP is found to have:</p> <p style="margin-left: 20px;">A. Failed to address the cause of the control device performance problems; or</p> <p style="margin-left: 20px;">B. Failed to provide adequate procedures for correcting control device performance problems as expeditiously as practicable in accordance with good air pollution control practices for minimizing emissions.</p> <p>(5) Implementation of a QIP shall not excuse the owner or operator of a source from compliance with any existing emission limitation or standard, or any existing monitoring, testing, reporting or recordkeeping requirement that may apply under federal, state, or local law, or any other applicable requirements under the Act.</p> <p>(c) Reporting and Recordkeeping Requirements</p> <p>(1) General reporting requirements</p> <p style="margin-left: 20px;">A. On and after the date specified in Section 33(a)(1) above by which the owner or operator must use monitoring that meets the requirements of this part, the owner or operator shall submit monitoring reports to the permitting authority in accordance with ADEM Admin. Code r. 335-3-16-.05(c)3.</p> <p style="margin-left: 20px;">B. A report for monitoring under this part shall include, at a minimum, the information required under ADEM Admin. Code r. 335-3-</p>	<p style="text-align: center;">40 CFR 64.9</p>

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<p>16-.05(c)3. and the following information, as applicable:</p> <ul style="list-style-type: none"> (i) Summary information on the number, duration and cause (including unknown cause, if applicable) of excursions or exceedances, as applicable, and the corrective actions taken; (ii) Summary information on the number, duration and cause (including unknown cause, if applicable) for monitor downtime incidents (other than downtime associated with zero and span or other daily calibration checks, if applicable); and (iii) A description of the actions taken to implement a QIP during the reporting period as specified in Section 33(b) above. Upon completion of a QIP, the owner or operator shall include in the next summary report documentation that the implementation of the plan has been completed and reduced the likelihood of similar levels of excursions or exceedances occurring. <p>(2) General recordkeeping requirements.</p> <ul style="list-style-type: none"> A. The owner or operator shall comply with the recordkeeping requirements specified in ADEM Admin. Code r. 335-3-16-.05(c)2.. The owner or operator shall maintain records of monitoring data, monitor performance data, corrective actions taken, any written quality improvement plan required pursuant to Section 33(b) above and any activities undertaken to implement a quality improvement plan, and other supporting information required to be maintained under this part (such as data used to document the adequacy of monitoring, or records of monitoring maintenance or corrective actions). B. Instead of paper records, the owner or operator may maintain records on alternative media, such as microfilm, computer files, magnetic tape disks, or microfiche, provided that the use of such alternative media allows 	

General Permit Provisos

Federally Enforceable Provisos	Regulations
<p style="text-align: center;">for expeditious inspection and review, and does not conflict with other applicable recordkeeping requirements.</p> <p>(d) Savings Provisions</p> <p>(1) Nothing in this part shall:</p> <p style="margin-left: 40px;">A. Excuse the owner or operator of a source from compliance with any existing emission limitation or standard, or any existing monitoring, testing, reporting or recordkeeping requirement that may apply under federal, state, or local law, or any other applicable requirements under the Act. The requirements of this part shall not be used to justify the approval of monitoring less stringent than the monitoring which is required under separate legal authority and are not intended to establish minimum requirements for the purpose of determining the monitoring to be imposed under separate authority under the Act, including monitoring in permits issued pursuant to title I of the Act. The purpose of this part is to require, as part of the issuance of a permit under title V of the Act, improved or new monitoring at those emissions units where monitoring requirements do not exist or are inadequate to meet the requirements of this part.</p> <p style="margin-left: 40px;">B. Restrict or abrogate the authority of the Department to impose additional or more stringent monitoring, recordkeeping, testing, or reporting requirements on any owner or operator of a source under any provision of the Act, including but not limited to sections 114(a)(1) and 504(b), or state law, as applicable.</p> <p style="margin-left: 40px;">C. Restrict or abrogate the authority of the Department to take any enforcement action under the Act for any violation of an applicable requirement or of any person to take action under section 304 of the Act.</p>	<p>40 CFR 64.10</p>

General Permit Provisos

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<p>34. <u>Emissions Inventory Reporting Requirements</u></p> <p>In order to meet the statewide emissions inventory reporting requirements under 40 CFR 51, Appendix A, the permittee shall comply with the reporting requirements under ADEM Admin. Code r. 335-3-1-.15.</p>	<p>Rule 335-3-1-.15</p>
<p>35. <u>Permit Shield</u></p> <p>A permit shield exists under this operating permit in accordance with ADEM Admin. Code 335-3-16-.10 in that compliance with the conditions of this permit shall be deemed in compliance with any applicable requirements as of the date of permit issuance. The permit shield is based on the accuracy of the information supplied in the application for this permit. Under this shield, it has been determined that requirements listed as non-applicable in the application are not applicable to this source.</p>	<p>Rule 335-3-16-.10</p>

Summary Page for 170 MW Natural Gas Fired Combustion Turbine w/ Natural Gas Fired 115 MMBtu/hr Duct Burner and Heat Recovery Steam Generator

Permitted Operating Schedule: 8760 Hrs/yr

Emission limitations:

Emission Point #	Description	Pollutant	Emission limit	Regulation
001	Combined CT/Duct Burner Exhaust	PM	Combined – 0.012 lb/MMBtu & 23.6 lb/hr	Rule 335-3-14-.04(9)(b) BACT
001	Combined CT/Duct Burner Exhaust	NOx	Combined – 0.013 lb/MMBtu & 26.8 lb/hr DB – 0.20 lb/MMBtu CT – STD = (0.0075(14.4)/Y) + F	Rule 335-3-14-.04(9)(b) BACT 40 CFR Part 60 Subpart Db 40 CFR 60.332(a)(1)
001	Combined CT/Duct Burner Exhaust	SO ₂	150 ppmvd at 15% O ₂ or Sulfur content limit of 0.8%	40 CFR Part 60 Subpart GG
001	Combined CT/Duct Burner Exhaust	CO	Combined – 0.086 lb/MMBtu & 176.6 lb/hr	Rule 335-3-14-.04(9)(b) BACT
001	Combined CT/Duct Burner Exhaust	VOC	Combined – 0.016 lb/MMBtu & 31.2 lb/hr	Rule 335-3-14-.04(9)(b) BACT
001	Combined CT/Duct Burner Exhaust	Opacity	10%	Rule 335-3-14-.04(9)(b) BACT

Provisos for 170 MW Natural Gas Fired Combustion Turbine w/ Natural Gas Fired 115 MMBtu/hr Duct Burner and Heat Recovery Steam Generator

Federally Enforceable Provisos	Regulations
<u>Applicability</u>	
1. This source is subject to the applicable requirements of ADEM Admin. Code r. 335-3-16, "Major Source Operating Permits."	Rule 335-3-16
2. This source is subject to the applicable requirements of ADEM Admin. Code r. 335-3-14-.04, "Air Permits Authorizing Construction in Clean Air Areas [Prevention of Significant Deterioration]."	Rule 335-3-14-.04
3. This source is subject to the applicable requirements of ADEM Admin. Code r. 335-3-10-.02(1), 40 CFR Part 60, Subpart A, "General Provisions."	Rule 335-3-10-.02(1) 40 CFR 60.1(a)
4. The combustion turbine associated with this unit is subject to the provisions of ADEM Admin. Code r. 335-3-10-.02(33), 40 CFR Part 60, Subpart GG "Standards of Performance for Stationary Gas Turbines."	Rule 335-3-10-.02(33) 40 CFR 60.330(a)-(b)
5. The duct burner associated with this unit is subject to the provisions of ADEM Admin. Code r. 335-3-10-.02(2)(b), 40 CFR Part 60, Subpart Db "Standards of Performance for Industrial-Commercial-Institutional Steam Generating Units."	Rule 335-3-10-.02(2)(b) 40 CFR 60.40b(a)
6. Where an applicable requirement of the Act is more stringent than an applicable requirement of regulations promulgated under Title IV of the Act, both provisions are incorporated as enforceable conditions of this permit.	Rule 335-3-16-.05(a)2
7. For nitrogen oxides, this source is subject to the applicable requirements of 40 CFR Part 64, "Compliance Assurance Monitoring", to include General Proviso # 33.	40 CFR Part 64
8. This source is subject to the applicable provisions of the Cross-State Air Pollution Rule found in ADEM Admin. Code r. 335-3-5-.06 through 335-3-5-.36 and ADEM Admin. Code r. 335-3-8-.07 through 335-3-8-.70.	Rules 335-3-5-.06 through 335-3-5-.36 and Rules 335-3-8-.07 through 335-3-8-.70
9. This source is subject to the applicable provisos of 40 CFR Part 98, "Mandatory Greenhouse Gas Reporting."	40 CFR Part 98
<u>Emission Standards</u>	

Federally Enforceable Provisos	Regulations
1. Emissions exceeding any allowances that the source lawfully holds under Title IV of the Act or the regulations promulgated thereunder are prohibited.	Rule 335-3-16-.05(d)
2. Nitrogen oxide emissions from the combustion turbine shall not exceed that which is determined by the equation in 40 CFR 60.332(a)(1).	Rule 335-3-10-.02(2)(b) (incorporating 40 CFR 60.332(a)(1))
3. Nitrogen Oxides emissions from the combined combustion turbine/duct burner stack shall not exceed 0.013 lb/MMBtu and 26.8 lbs/hr. The nitrogen oxide emission rate shall be monitored using a rolling three-hour average computed by the continuous emission monitor system.	Rule 335-3-14-.04(9)(b) BACT
4. Nitrogen Oxides emissions from the duct burner shall not exceed 0.20 lb/MMBtu.	Rule 335-3-10-.02(2)(b) 40 CFR 60.44b
5. Carbon Monoxide emissions from the combined combustion turbine/duct burner stack shall not exceed 0.086 lb/MMBtu and 176.6 lbs/hr.	Rule 335-3-14-.04(9)(b) BACT
6. Volatile organic emissions from the combined combustion turbine/duct burner stack shall not exceed 0.016 lb/MMBtu 31.2 lbs/hr.	Rule 335-3-14-.04(9)(b) BACT
7. Particulate emissions from the combined turbine/duct burner stack shall not exceed 0.012 lb/MMBtu and 23.6 lb/hr.	Rule 335-3-14-.04(9)(b) BACT
8. Visible emissions from the combined turbine/duct burner stack shall not exceed 10% opacity.	Rule 335-3-14-.04(9)(b) BACT
9. No owner or operator shall burn in any stationary gas turbine any fuel which contains sulfur in excess of 0.8 percent by weight or 150 ppmvd at 15% oxygen.	Rule 335-3-10-.02(33) 40 CFR 60.333
10. During periods of startup, shutdown and load change (as defined below), the permittee shall comply with the following work practice limitations in lieu of the numerical limits in Provisos 3-8 above:	Rule 335-3-14-.03(1)(h)
(a) Take all reasonable actions to minimize the magnitude and duration of elevated emission conditions during these periods;	
(b) Employ good operation and maintenance practices on CT/DB, including on associated pollution control technology; and	
(c) Comply with emission monitoring, recordkeeping, and reporting requirements in this permit.	

Federally Enforceable Provisos**Regulations**

During periods of startup, of the CT, the permittee shall initiate reagent flow in the SCR once the flue gas reaches the requisite temperature for NOx control, also considering the technological limitations, manufacturers' specifications, and good engineering and maintenance practices.

During periods of startup of the DB, periods of shutdown of the DB, or any other periods of load change, the permittee shall maintain reagent flow in the SCR consistent with technological limitations, manufacturers' specifications, and good engineering and maintenance practices for SCR and so as to minimize NOx emissions to the extent reasonably practicable.

During periods of shutdown of the CT, the permittee shall maintain reagent flow in the SCR until the flue gas temperature falls below the requisite temperature for NOx control, also considering technological limitations, manufacturers' specifications, and good engineering and maintenance practices.

Startup: The period from when the combustion turbine is started until it reaches "Dry Low NOx (DLN)" mode of combustion.

Shutdown: The period when the load on the combustion turbine is decreasing from Dry Low NOx (DLN) mode of combustion.

Load Change: A change in heat input that creates a transient operating condition that is readily identifiable on the load chart recording.

11. The combustion turbine and duct burner shall fire only natural gas.

Rule 335-3-14-.04

Compliance and Performance Test Methods and Procedures

1. Compliance with the Nitrogen Oxides emissions standards shall be determined by EPA Reference Method 20 or 7E as found in Appendix A of 40 CFR Part 60.

Rule 335-3-1-.05

2. Compliance with the Carbon Monoxide emissions standards shall be determined by EPA Reference Method 10 as found in Appendix A of 40 CFR Part 60.

Rule 335-3-1-.05

3. Compliance with the Volatile Organic Compounds emissions standards shall be determined by EPA Reference Method 25, 25A, or 25B, as found in Appendix A of 40 CFR Part 60.

Rule 335-3-1-.05

4. Compliance with the particulate emissions standards shall be determined by EPA Reference Method 5 or 17, as found in Appendix A of 40 CFR Part 60.

Rule 335-3-1-.05

Federally Enforceable Provisos**Regulations**

5. Compliance with the opacity standards shall be determined by EPA Reference Method 9 as found in Appendix A of 40 CFR Part 60.

Rule 335-3-1-.05

Emission Monitoring

1. This source is subject to the applicable requirements of 40 CFR Part 64, "Compliance Assurance Monitoring" to include the Operation of approved monitoring as detailed in §64.7. This monitoring shall be conducted in accordance with the attached Appendix.
2. The NO_x emission rate from this unit shall be monitored by the NO_x Continuous Emissions Monitoring System (CEMS). The NO_x emission rate shall be monitored on a rolling three-hour average. The NO_x CEMS shall be maintained and certified using the procedures of 40 CFR Part 75.

40 CFR Part 64

40 CFR Part 75
Rule 335-3-16-.05(c)
40 CFR Part 64Recordkeeping and Reporting Requirements

1. This source is subject to the applicable requirements of 40 CFR Part 64, "Compliance Assurance Monitoring" to include the Reporting and Recordkeeping Requirements in §64.9.
2. An excess emissions report for the combined turbine/duct burner stack as defined by 40 CFR Part 60 , Subpart A, §60.7(c) and (d), will be submitted to the ADEM within thirty days of the end of each calendar quarter. The report will contain the following format:

40 CFR 64.9

Rule 335-3-16-.05(c)
40 CFR 64.9NO_x

- A. Source Operating Time (all times and periods in hours unless otherwise noted)
- B. Time Monitoring System was Able to Record Source Performance *
- C. Monitor Availability (%) = $B/A \times 100$
- D. Total Periods where the CEM data may indicate emissions above the numerical limitation **(3 hour periods)
- E. Overall Source Performance (%) = $[(B - D)/B] \times 100$
- F. Number of periods above the numerical limitation during periods subject to work practice limitations - F(x)(3 hour periods)
- F1 = Startup/Shutdown
- F2 = Load Change
- G. Net Excess Emissions = $D - \sum F(x)(3 \text{ hour periods})$
- H. Net Source Performance (%) - H(x):

Federally Enforceable Provisos**Regulations**

$$= [1 - (G(x)/(B - \sum F(x)))] \times 100$$

$$= [(B - \sum F(x) - G(x))/(B - \sum F(x))] \times 100$$

I. Overall Exceedances (%) - Percent of time above the numerical limitation due to all reasons:

$$= 100-E$$

J. Net Exceedances (%) - Percent of time above the numeric limitations during periods subject to the numeric limitations

$$= 100-H$$

K. Percent of time above the numeric limitations during periods subject to work practice limitations:

$$SU/SD = (F_1/B) \times 100$$

$$\text{Load Change} = (F_2/B) \times 100$$

* Information identifying each period during which the monitoring systems were inoperative (except for zero and span checks) and the nature of the system repairs or adjustments will be maintained and made available upon request.

** Report date, time duration, magnitude, cause and corrective action taken for each occurrence. NO_x emissions rate (lb/MMBtu) will be computed as a 3-hour rolling average.

NOTE: Data recorded during periods of system breakdowns, repairs, adjustments, and calibration checks shall not be included in any of the above data averages.

3. If utilized, natural gas supplier certifications shall contain the name of the supplier and a statement from the supplier that the natural gas complies with the sulfur content limit.

Rule 335-3-10-.02(2)(b)
40 CFR 60.49b(r)(1)

4. The permittee shall comply with the recordkeeping and reporting requirements of the Mandatory Greenhouse Gas Reporting Rule in 40 CFR Part 98.

40 CFR Part 98

5. The facility shall comply with the recordkeeping and reporting requirements of Rules 335-3-5-.35, 335-3-8-.33, and 335-3-8-.37.

Rules 335-3-5-.35, 335-3-8-.33, and 335-3-8-.37

Acid Rain Requirements

1. This unit is subject to the Acid Rain Rules contained in Rule 335-3-18 and 40 CFR Parts 72, 73, and 75. The applicable Acid Rain Permit is contained in the Acid Rain portion of this Operating Permit.

Rule 335-3-18 and 40 CFR Parts 72, 73, and 75

CSAPR Requirements

Federally Enforceable Provisos**Regulations**

- | Federally Enforceable Provisos | Regulations |
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| 1. This unit is subject to the applicable provisions of Cross-State Air Pollution Rule(CSAPR) to include all applicable provisions of the SO ₂ Group 2 Trading Program requirements. | Rules 335-3-5-.06 through 335-3-5-.36 |
| 2. This unit is subject to the applicable provisions of Cross-State Air Pollution Rule(CSAPR) to include all applicable provisions of the NO _x Annual and Seasonal Trading Program requirements. | Rules 335-3-8-.07 through 335-3-8-.70 |

Summary Page for Two (2) 275 MMBtu/hr Natural Gas Fired Boilers w/ FGR

Permitted Operating Schedule: 8760 Hrs/yr

Emission limitations:

Emission Point #	Description	Pollutant	Emission limit Each Boiler	Regulation
002, 003	275 MMBtu/hr Natural Gas Fired Boilers (PB1R, PB2R)	PM	0.12 lb/MMBtu	Rule 335-3-4-.03 Table 4-1
002, 003	275 MMBtu/hr Natural Gas Fired Boilers (PB1R, PB2R)	NOx	0.20 lb/MMBtu	40 CFR Part 60 Subpart Db
002, 003	275 MMBtu/hr Natural Gas Fired Boilers (PB1R, PB2R)	SO ₂	1.8 lb/MMBtu	Rule 335-3-5-.01(1)(a)
002, 003	275 MMBtu/hr Natural Gas Fired Boilers (PB1R, PB2R)	CO	N/A	N/A
002, 003	275 MMBtu/hr Natural Gas Fired Boilers (PB1R, PB2R)	VOC	N/A	N/A
002, 003	275 MMBtu/hr Natural Gas Fired Boilers (PB1R, PB2R)	HAPs	N/A	N/A
002, 003	275 MMBtu/hr Natural Gas Fired Boilers (PB1R, PB2R)	Opacity	20/40%	Rule 335-3-4-.01(1)

Provisos for Two (2) 275 MMBtu/hr Natural Gas Fired Boilers w/ FGR

Federally Enforceable Provisos	Regulations
<u>Applicability</u>	
1. These sources are subject to the applicable requirements of ADEM Admin. Code r. 335-3-16, "Major Source Operating Permits".	Rule 335-3-16
2. These sources are subject to the applicable requirements of ADEM Admin. Code r. 335-3-14-.04, "Air Permits Authorizing Construction in Clean Air Areas [Prevention of Significant Deterioration]."	Rule 335-3-14-.04 Anti-PSD
3. These sources are subject to the applicable requirements of ADEM Admin. Code r. 335-3-10-.02(1), 40 CFR Part 60, Subpart A, "General Provisions."	Rule 335-3-10-.02(1) 40 CFR 60.1(a)
4. These sources are subject to the applicable requirements of ADEM Admin. Code r. 335-3-10-.02(2)(b), 40 CFR Part 60, Subpart Db "Standards of Performance for Industrial-Commercial-Institutional Steam Generating Units."	Rule 335-3-10-.02(2)(b) 40 CFR 60.40b(a)
5. These sources are subject to the applicable provisions of 40 CFR Part 98, "Mandatory Greenhouse Gas Reporting."	40 CFR Part 98
<u>Emission Standards</u>	
1. The package boilers shall fire only natural gas.	Rule 335-3-14-.04 Anti-PSD
2. Particulate matter emissions from these units shall not exceed 0.12 lb/MMBtu.	Rule 335-3-4-.03 Table 4-1
3. Nitrogen Oxide emissions from these units shall not exceed 0.20 lb/MMBtu.	Rule 335-3-10-.02(2)(b) 40 CFR 60.44b
4. Sulfur Dioxide emissions from these units shall not exceed 1.8 lb/MMBtu.	Rule 335-3-5-.01(1)(a)
5. This unit must comply with the opacity requirements of General Proviso 29.	Rule 335-3-4-.01(1)
<u>Compliance and Performance Test Methods and Procedures</u>	
1. Compliance with the Nitrogen Oxides emissions standards shall be determined by EPA Reference Method 7 or 7E as found in Appendix A of 40 CFR Part 60.	Rule 335-3-1-.05

Federally Enforceable Provisos**Regulations**

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| 2. Compliance with the particulate emissions standards shall be determined by EPA Reference Method 5 or 17, as found in Appendix A of 40 CFR Part 60. | Rule 335-3-1-.05 |
| 3. Compliance with the opacity standards shall be determined by EPA Reference Method 9, as found in Appendix A of 40 CFR Part 60. | Rule 335-3-1-.05 |
| 4. Compliance with the Sulfur Dioxide emissions standard shall be determined by EPA Reference Method 6, as found in Appendix A of 40 CFR Part 60. | Rule 335-3-1-.05 |

Emission Monitoring

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| 1. The NO _x emission rate from these units shall be monitored by the NO _x Continuous Emissions Monitoring System (CEMS). The NO _x emission rate shall be monitored on a rolling thirty-day average. The NO _x CEMS shall be maintained and certified using the procedures of 40 CFR Part 60, Subpart Db. | Rule 335-3-16-.05(c)
40 CFR Part 60
Subpart Db |
| 2. The CEMS required under paragraph (b) of 60.48b shall be operated and data recorded during all periods of operation of the affected facility except for CEMS breakdowns and repairs. Data is recorded during calibration checks, and zero and span adjustments. | Rule 335-3-10-.02(2)(b)
40 CFR 60.48b |

The 1-hour average NO_x emission rates measured by the continuous NO_x monitor required by paragraph (b) of 60.48b and required in 60.13(h) shall be expressed in ng/J or lb/MMBtu heat input and shall be used to calculate the average emission rates under 60.44b. The 1-hour averages shall be calculated using the data points required under 60.13 (h) (2).

When NO_x emission data are not obtained because of CEMS breakdowns, repairs, calibration checks and zero and span adjustments, emission data will be obtained by using standby monitoring systems. Method 7 of appendix A to 40 CFR 60, Method 7A of appendix A to 40 CFR Part 60, or other approved reference methods to provide emission data for a minimum of 75 percent of the operating hours in each steam generating unit operating day, in at least 22 out of 30 successive steam generating unit operating days.

Recordkeeping and Reporting Requirements

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| 1. Within 30 days after the end of each calendar quarter, the permittee will submit an excess NO _x emissions report (EER) to the Department. This report shall contain all the applicable information required by 40 CFR 60.49b. | Rule 335-3-10-.02(2)(b)
40 CFR 60.49b |
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Federally Enforceable Provisos**Regulations**

- | Federally Enforceable Provisos | Regulations |
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| 2. Per CFR 60.49b(r), the permittee shall maintain records verifying that only natural gas was combusted in the package boilers. | Rule 335-3-10-.02(2)(b)
40 CFR 60.49b(r) |
| 3. The permittee shall submit the applicable report(s) to the Department according to the requirements of the Greenhouse Gas Reporting Rule in 40 CFR Part 98. | 40 CFR Part 98 |

Summary Page for MACT Subpart ZZZZ – Existing Emergency Firewater Pump Engine

Permitted

Operating Schedule: 8760 Hrs/yr for
Emergency Use*

*See unit specific emission standards for operating limitations

Emission limitations:

Emission Point #	Description	Pollutant	Emission limit	Regulation
004	208 HP Existing Diesel Fired Firewater Pump Engine	Opacity	20/40%	Rule 335-3-4-.01(1)

Provisos for MACT Subpart ZZZZ – Existing Emergency Firewater Pump Engine

Federally Enforceable Provisos	Regulations
<u>Applicability</u>	
1. This source is subject to the applicable requirements of ADEM Admin. Code r. 335-3-16-.03, “Major Source Operating Permits”.	Rule 335-3-16-.03
2. This source is subject to the applicable requirements of 40 CFR Part 63, Subpart ZZZZ, “National Emission Standards for Hazardous Air Pollutants for Reciprocating Internal Combustion Engines (RICE)”.	Rule 335-3-11-.06(103) 40 CFR 63.6585 40 CFR 63.6590(a)(1)(iii)
3. This source is subject to the applicable requirements of Subpart A of 40 CFR Part 63, "General Provisions" as listed in Table 8 of Subpart ZZZZ.	Rule 335-3-11-.06(1) 40 CFR 63.6665
<u>Emission Standards</u>	
1. This source is subject to the applicable requirements listed in Table 2d of 40 CFR Part 63, Subpart ZZZZ—National Emissions Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines.	Rule 335-3-11-.06(103) 40 CFR 63.6603
2. The Permittee must operate and maintain this unit according to the manufacturer's emission-related written instructions or develop a maintenance plan which must provide to the extent practicable for the maintenance and operation of the engine in a manner consistent with good air pollution control practice for minimizing emissions.	Rule 335-3-11-.06(103) 40 CFR 63.6625(e)(3)
3. The firewater pump shall be equipped with a non-resettable hour meter.	Rule 335-3-11-.06(103) 40 CFR 63.6625(f)
4. This unit may be operated for the purpose of maintenance checks and readiness testing, provided that the tests are recommended by Federal, State or local government, the manufacturer, the vendor, or the insurance company associated with the engine. Maintenance checks and readiness testing of these units are limited to 100 hours per year. There is no time limit on the use of these units in emergency situations. The owner or operator may petition the Administrator for approval of additional hours to be used for maintenance checks and readiness testing, but a petition is not required if the owner or operator maintains records indicating that Federal, State, or local standards require	Rule 335-3-11-.06(103) 40 CFR 63.6640(f)

Federally Enforceable Provisos

Regulations

maintenance and testing of emergency ICE beyond 100 hours per year . This unit may operate up to 50 hours per year in non-emergency situations, but those 50 hours are counted towards the 100 hours per year provided for maintenance and testing. The 50 hours per year for non-emergency situations cannot be used for peak shaving or to generate income for a facility to supply power to an electric grid or otherwise supply non-emergency power as part of a financial arrangement with another entity. Any operation other than emergency operation, maintenance and testing, and operation in non-emergency situations for 50 hours per year, as permitted in 40 CFR Part 63, Subpart ZZZZ, is prohibited.

Compliance and Performance Test Methods and Procedures

1. Method 9 of 40 CFR (Latest Edition) Part 60, Appendix A shall be used in the determination of the opacity.

Rule 335-3-1-.05

Emission Monitoring

1. The Permittee shall perform the following activities:
 - (a) Change oil and filter every 500 hours of operation or annually, whichever comes first;
 - (b) Inspect air cleaner every 1,000 hours of operation or annually, whichever comes first;
 - (c) Inspect all hoses and belts every 500 hours of operation or annually, whichever comes first, and replace as necessary.

40 CFR Part 63
Subpart ZZZZ Table 2d
Rule 335-3-11-.06(103)
40 CFR 63.6625(i)

Or utilize an oil analysis program as described in §63.6625(i).

2. If an oil analysis program is utilized for a stationary compression ignition engine, the Permittee must perform the oil analysis at the same frequency specified above for changing the oil. The Permittee must at a minimum analyze the following parameters: Total Base Number, viscosity, and percent water content. The condemning limits for these parameters are as follows: Total Base Number is less than 30 percent of the Total Base Number of the oil when new, viscosity of the oil has changed by more than 20 percent from the viscosity of the oil when new, or percent water content (by volume) is greater than 0.5. If any of the limits are exceeded, the Permittee must change the oil within 2 business days of receiving the results of the analysis or before commencing operation, whichever is later.

Rule 335-3-11-.06(103)
40 CFR 63.6625(i)

Federally Enforceable Provisos

Regulations

Recordkeeping and Reporting Requirements

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| <p>1. The Permittee must keep records of the parameters that are analyzed as part of the oil analysis program, the results of the analysis, and the oil changes for the engine. The analysis program must be part of the maintenance plan for the engine.</p> | <p>Rule 335-3-11-.06(103)
40 CFR 63.6625(i)</p> |
| <p>2. The Permittee must keep records of the maintenance conducted on this unit in order to demonstrate that you operated and maintained this unit and after-treatment control device (if any) according to your own maintenance plan or according to manufacturer's written instructions.</p> | <p>Rule 335-3-11-.06(103)
40 CFR 63.6655(e)</p> |
| <p>3. The Permittee must keep records of the hours of operation of each engine that is recorded through the non-resettable hour meter. The facility must document how many hours are spent for emergency operation, including what classified the operation as emergency and how many hours are spent for non-emergency operation.</p> | <p>Rule 335-3-11-.06(103)
40 CFR 63.6655(f)</p> |

Summary Page for Plant Emergency Generator

Permitted Operating Schedule: 8760 Hrs/yr for Emergency Use*
*See unit specific emission standards for operating limitations

Emission limitations:

Emission Point #	Description	Pollutant	Emission limit	Regulation
005	Plant Emergency Generator	Opacity	20/40%	Rule 335-3-4-.01(1)

Provisos for Plant Emergency Generator

Federally Enforceable Provisos	Regulations
<u>Applicability</u>	
1. This unit is subject to the provisions of ADEM Admin. Code r. 335-3-16, “Major Source Operating Permits.”	Rule 335-3-16
2. This unit is subject to the applicable requirements of ADEM Admin. Code r. 335-3-10-.02(1), 40 CFR Part 60, Subpart A, “General Provisions” as listed in Table 8 to 40 CFR Part 60, Subpart III.	Rule 335-3-10-.02(87) 40 CFR 60.4218
3. This unit is subject to the provisions of ADEM Admin. Code r. 335-3-10-.02(87), “Standards of Performance for Stationary Compression Ignition Internal Combustion Engines (Subpart III)” and 335-3-11-.06(103), “National Emissions Standards for Hazardous Air Pollutant Emissions from Stationary Reciprocating Internal Combustion Engines (Subpart ZZZZ).”	Rule 335-3-10-.02(87) Rule 335-3-11-.06(103) 40 CFR 60.4200(a)(2)(i) 40 CFR 63.6590(c)(1)
<u>Emission Standards</u>	
1. As a new emergency stationary RICE with displacement less than 30 liters per cylinder and is not a fire pump engine, this unit is subject to the emission standards specified in 40 CFR 60.4202.	Rule 335-3-10-.02(87) 40 CFR 60.4205(b)
2. This unit must use diesel fuel that meets the requirements in 40 CFR 80.510(b) for nonroad diesel fuel.	Rule 335-3-10-.02(87) 40 CFR 60.4207(b)
3. This unit must be operated and maintained as specified in 40 CFR 60.4211(a).	Rule 335-3-10-.02(87) 40 CFR 60.4211(a)
4. As an emergency stationary RICE, any operation other than emergency operation, maintenance and testing, and operation in non-emergency situations for more than 50 hours per year, as described below, is prohibited.	Rule 335-3-10-.02(87) 40 CFR 60.4211(f)
(a) There is no limit on the use of emergency stationary RICE in emergency situations.	
(b) The emergency stationary RICE may be operated for any combination of the purposes specified in 40 CFR 60.4211(f)(2)(i) and 60.4211(f)(3) for a maximum of 100 hours per calendar year.	
<u>Compliance and Performance Test Methods and Procedures</u>	

Federally Enforceable Provisos**Regulations**

1. The permittee shall comply with the emission standards by purchasing an engine certified by the manufacturer to the emission standards in 40 CFR 60.4202(a)(2), as applicable, for the same model year and maximum engine power.
2. This unit must be equipped with a non-resettable hour meter.

Rule 335-3-10-.02(87)
40 CFR 60.4211(c)

Rule 335-3-10-.02(87)
40 CFR 60.4209(a)

Monitoring Requirements

There are no unit-specific monitoring requirements for this unit.

Recordkeeping and Reporting Requirements

1. The permittee shall keep records of the operation of this engine in emergency and non-emergency service that are recorded through the non-resettable hour meters. The permittee must also record the time of operation of the engine and the reason the engine was in operation during that time.

Rule 335-3-10-.02(87)
40 CFR 60.4214(b)

Alternate Operating Scenario

1. If this unit is operated as non-emergency stationary RICE, the permittee shall notify ADEM and comply with the applicable provisions of ADEM Admin. Code r. 335-3-10-.02(87), "Standards of Performance for Stationary Compression Ignition Internal Combustion Engines (Subpart III)" and 335-3-11-.06(103), "National Emissions Standards for Hazardous Air Pollutant Emissions from Stationary Reciprocating Internal Combustion Engines (Subpart ZZZZ)" notwithstanding other provisions of this permit to the contrary.

Rule 335-3-10-.02(87)
40 CFR 60.4204

Compliance Assurance Monitoring (CAM) Plan

**Theodore Cogeneration
Compliance Assurance Monitoring
Combustion Turbine, Duct Burner & HRSG
SCR for NOx Emission Control**

Submittal Reference	Monitoring Design Criteria Reference	Monitoring Design Requirement	Monitoring Approach
64.4 (a)(1)	64.3 (a)(1)	Indicator of Emission Control Performance	NOx emission rate in lbs/mmBtu is the indicator of SCR performance.
64.4 (a)(2)	64.3 (a)(2)	Designated Indicator Condition that provides reasonable assurance of ongoing compliance	A NOx emission rate of 0.013 lb/mmBtu monitored using a rolling 3-hour average computed by CEMS is the designated indicator condition that provides reasonable assurance of ongoing compliance.
64.4 (a)(3)	64.3 (b)	Performance Criteria: (1) Obtain Representative Data (2) Verify Operational Status (3) Establish QA/QC Practices (4) Set Frequency of Data Collection and the Exceedance Averaging Period	(1) The exhaust gas is continuously sampled by a probe located in the stack of each unit in accordance with 40 CFR 60, Appendix A. The NOx concentration of the exhaust gas sample is measured by the NOx CEMS analyzer in ppmv. The NOx concentration is converted to lb/mmBtu and recorded by the CEMS DAHS. (2) The initial testing and certification procedures in 40 CFR 75, Appendix A and the performance protocol (PS2) in 40 CFR 60, Appendix B were used to verify the CEMS operational status. (3) The QA/QC practices that ensure continuing validity of the data are included in the plant's Quality Assurance Plan (QAP) in accordance with 40 CFR 75. (4) Data is collected continuously and a rolling 3-hour average is computed by the CEMS DAHS to determine whether an exceedance has occurred.
64.4 (a)(4)	64.3 (d)	Special Criteria for the use of CEMS	The air permit requires monitoring of the NOx emission rate on a 3-hour rolling average by CEMS, and the CEMS allows for the reporting of exceedances.
64.4 (b)	64.3 (d)	Justification of Monitoring Approach/ Explanation of Monitoring Applicability	By stating that the NOx emission rate shall not exceed 0.013 lb/mmBtu and by requiring monitoring using a 3-hour rolling average as computed by CEMS, the air permit justifies designating the NOx emission rate of 0.013 lb/mmBtu monitored using a rolling 3-hour average computed by the CEMS as the monitoring approach that provides reasonable assurance of ongoing compliance.
64.4 (c)		Control Device Performance Testing	Performance testing was conducted in accordance with 40 CFR 60. The test report was provided to ADEM on February 16, 2001. No changes that could result in a significant change in unit or SCR performance have been made since conducting the performance testing.

Phase II Acid Rain Permit

Issued by: Alabama Department of Environmental Management
Issued to: Alabama Power Company – Theodore Cogeneration Plant
Operated by: Alabama Power Company
ORIS Code: 7721
Effective: April 1, 2021 through March 31, 2026

Acid Rain Permit Contents

- 1) Statement of Basis
- 2) SO₂ allowances allocated under this permit and NO_x requirements for each affected unit.
- 3) Comments, notes and justifications regarding permit decisions and changes made to the permit application forms during the review process and any additional requirements or conditions.
- 4) The Phase II Permit Application submitted for this source. The owners and operators of the source must comply with the standard requirements and special provisions set forth in the Phase II Permit Application.
- 5) Summary of Previous Actions and Current Action.

1) Statement of Basis:

Statutory and Regulatory Authorities: In accordance with the Code of Alabama 1975, §§ 22-22A-4, 22-22A-6, 22-22A-8, 22-28-14, and Titles IV and V of the Clean Air Act, the Alabama Department of Environmental Management issues this permit pursuant to ADEM Admin. Codes 335-3-16 and 335-3-18.

2) SO₂ Allowance Allocations and NO_x Requirements for each affected unit:

		2021	2022	2023	2024	2025
CC1	SO ₂ allowances, under 40 CFR part 73 [tons]	NA ¹	NA ¹	NA ¹	NA ¹	NA ¹
	NO _x limit [lb/MMBtu]	□2	□2	□2	□2	□2

1 The number of allowances allocated to Phase II affected units by U.S. EPA may change under 40 CFR Part 73. In addition, the number of allowances actually held by an affected source in a unit account may differ from the number allocated by U.S. EPA. Neither of the aforementioned conditions necessitate a revision to SO₂ allowance allocations identified in this permit [See 40 CFR 72.84].

2 40 CFR Part 76 does not establish a NO_x emission rate for Combined Cycle Combustion Turbine Unit CC1.

3) Comments, Notes, and Justifications: This facility consists of a combined cycle 170 MW Natural Gas Fired Combustion Turbine with a Natural Gas Fired 115 MMBtu/hr Duct Burner and Heat Recovery Steam Generator and 2 - 275 MMBtu/hr Natural Gas Fired Boilers. The Heat Recovery Steam Generator supplies steam to two nearby industrial facilities and a 40 MW steam turbine. The two natural gas fired boilers also supply steam to the two industrial facilities. The two natural gas fired boilers are not used for electric generation and are not affected units under Acid Rain.

It should be noted that the compliance certification report shall cover each calendar year in which year the unit is subject to an Acid Rain limitation.

4) Phase II Permit Application: Attached.

5) Summary of Previous Actions and Current Action:

Action	Date
1. Draft permit prepared and submitted for public review and comment.	May 24, 2000
2. Permit finalized and issued.	June 29, 2000
3. Permit revised for an administrative permit amendment to include actual dates for commencement of operation and monitor certification.	September 28, 2001
4. Draft permit renewal prepared and submitted for public review and comment.	November 25, 2005
5. Renewal permit finalized and issued.	January 3, 2006
6. Draft permit renewal prepared and submitted for public review and comment.	February 4, 2011
7. Renewal permit finalized and issued.	March 22, 2011
8. Draft permit prepared and submitted for public review and comment.	January 29, 2016
9. Permit finalized and re-issued.	March 15, 2016
10. Draft permit prepared and submitted for public review and comment.	TBD
11. Permit finalized and re-issued.	TBD

Ronald W. Gore, Chief
Air Division

Date