



MAJOR SOURCE OPERATING PERMIT

PERMITTEE:GULFSTREAM NATURAL GAS SYSTEM, LLCFACILITY NAME:COMPRESSOR STATION 100/410FACILITY/PERMIT NO.:503-0046LOCATION:CODEN, MOBILE COUNTY, ALABAMA

In accordance with and subject to the provisions of the Alabama Air Pollution Control Act of 1971, <u>Ala. Code</u> §§ 22-28-1 to 22-28-23, as amended, the Alabama Environmental Management Act, <u>Ala. Code</u> §§ 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:	DRAFT
Effective Date:	July 7, 2020
Expiration Date:	July 6, 2025

Alabama Department of Environmental Management

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	General Permit Provisos	
	Federally Enforceable Provisos	Regulations
1.	<u>Transfer</u>	
	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 ADEM Admin. Code r. 335-3-1613(1)(a)5.	ADEM Admin. Code r. 335-3-1602(6)
2.	Renewals	
	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.	ADEM Admin. Code r. 335-3-1612(2)
	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.	
3.	Severability Clause	
	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.	ADEM Admin. Code r. 335-3-1605(e)
4.	Compliance	
	(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.	ADEM Admin. Code r. 335-3-1605(f)
	(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.	ADEM Admin. Code r. 335-3-1605(g)
5.	Termination for Cause	
	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.	ADEM Admin. Code r. 335-3-1605(h)

	Federally Enforceable Provisos	Regulations
6.	Property Rights	
	The issuance of this permit does not convey any property rights of any sort, or any exclusive privilege.	ADEM Admin. Code r. 335-3-1605(i)
7.	Submission of Information	
	The permittee must submit to the Air Division, within 30 days or for such other reasonable time as the Air Division may set, any information that the Air Division 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 Air Division copies of records required to be kept by this permit.	ADEM Admin. Code r. 335-3-1605(j)
8.	Economic Incentives, Marketable Permits, and Emissions Trading	
	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.	ADEM Admin. Code r. 335-3-1605(k)
9.	Certification of Truth, Accuracy, and Completeness	
	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.	ADEM Admin. Code r. 335-3-1607(a)
10	. Inspection and Entry	
	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:	ADEM Admin. Code r. 335-3-1607(b)
	 (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;	

Federally Enforceable Provisos	Regulations
(d) Sample or monitor, at reasonable times, substances or parameters for the purpose of assuring compliance with this permit or other applicable requirements.	
11. <u>Compliance Provisions</u>	
(a) The permittee shall continue to comply with the applicable requirements with which the company has certified that it is already in compliance.	ADEM Admin. Code r. 335-3-1607(c)
(b) The permittee shall comply in a timely manner with applicable requirements that become effective during the term of this permit.	
12. <u>Compliance Certification</u>	
The permittee shall submit a complete and accurate compliance certification by September 5th of each year for each annual reporting period of this permit (July 7 th – July 6 th).	ADEM Admin. Code r. 335-3-1607(e)
(a) The compliance certification shall include the following:	
(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 status of the source, currently and over the reporting period consistent with ADEM Admin. Code r. 335-3-1605(c) (Monitoring and Recordkeeping Requirements); 	
(4) Whether compliance has been continuous or intermittent;	
(5) Such other facts as the Air Division may require to determine the compliance status of the source;	
(b) The compliance certification shall be submitted to:	
Alabama Department of Environmental Management Air Division P.O. Box 301463 Montgomery, AL 36130-1463	
and to:	
Enforcement and Compliance Assurance Division EPA Region 4 Atlanta Federal Center 61 Forsyth Street, SW Atlanta, GA 30303	

Federally Enforceable Provisos	Regulations
13. <u>Reopening for Cause</u>	
Under any of the following circumstances, this permit will be reopened prior to the expiration of the permit:	ADEM Admin. Code r. 335-3-1613(5)
 (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. 	
(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.	
(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.	
(d) The Administrator or the Department determines that this permit must be revised or revoked to assure compliance with the applicable requirements.	
14. Additional Rules and Regulations	
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.	§22-28-16(d), <u>Code of</u> <u>Alabama 1975,</u> as amended
15. <u>Equipment Maintenance or Breakdown</u>	
 (a) In 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 Air Division at least (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: 	ADEM Admin. Code r. 335-3-107(1),(2)
 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;	

	Federally Enforceable Provisos	Regulations
(3)	The nature and quality 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 sources operation during the maintenance period.	
of car ab equ wo inc Dir	the event that there is a breakdown of equipment or upset process in such a manner as to cause, or is expected to use, increased emissions of air contaminants which are ove an applicable standard, the person responsible for such uipment shall notify the Director within 24 hours or the next orking day and provide a statement giving all pertinent facts, cluding the estimated duration of the breakdown. The rector will be notified when the breakdown has been rrected.	
6. <u>Opera</u>	tion of Capture and Control Devices	
permit manne Procec operat	pollution control devices and capture systems for which this t is issued shall be maintained and operated at all times in a er so as to minimize the emissions of air contaminants. dures for ensuring that the above equipment is properly ted and maintained so as to minimize the emission of air minants shall be established.	§22-28-16(d), <u>Code of</u> <u>Alabama 1975</u> , as amended
7. <u>Obnoz</u>	<u>kious Odors</u>	
odors inspec taken Enviro	permit is issued with the condition that, should obnoxious arising from the plant operations be verified by Air Division etors, measures to abate the odorous emissions shall be upon a determination by the Alabama Department of onmental Management that these measures are technically conomically feasible.	ADEM Admin. Code r. 335-3-108
8. <u>Fugiti</u>	ive Dust	
fro	ecautions shall be taken to prevent fugitive dust emanating om plant roads, grounds, stockpiles, screens, dryers, ppers, ductwork, etc.	ADEM Admin. Code r. 335-3-402
fol mi sh	ant or haul roads and grounds will be maintained in the lowing manner so that dust will not become airborne. A inimum of one, or a combination, of the following methods all be utilized to minimize airborne dust from plant or haul ads and grounds:	

General	Permit	Provisos
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	Federally Enforceable Provisos	Regulations
	(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;	
	(2) By reducing the speed of vehicular traffic to a point below that at which dust emissions are created;	
	(3) By paving;	
	(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.	
	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 Air Division prior to utilization.	
Add	ditions and Revisions	
pro	y modifications to this source shall comply with the modification ocedures in ADEM Admin. Code r. 335-3-1613 or 5-3-1614.	ADEM Admin. Code : 335-3-1613 and 335-3-1614
pro 335	cedures in ADEM Admin. Code r. 335-3-1613 or	335-3-1613 and
pro 335 <b>Rec</b> (a)	cedures in ADEM Admin. Code r. 335-3-1613 or 5-3-1614.	335-3-1613 and 335-3-1614
pro 335 (a)	Cocedures in ADEM Admin. Code r. 335-3-1613 or5-3-1614.Cordkeeping RequirementsRecords of required monitoring information of the source shall	335-3-1613 and 335-3-1614 ADEM Admin. Code
pro 335 (a)	Cocedures in ADEM Admin. Code r. 335-3-1613 or5-3-1614.Cordkeeping RequirementsRecords of required monitoring information of the source shall include the following:	335-3-1613 and 335-3-1614 ADEM Admin. Code
pro 335 (a)	<ul> <li>ADEM Admin. Code r. 335-3-1613 or 5-3-1614.</li> <li>Cordkeeping Requirements</li> <li>Records of required monitoring information of the source shall include the following:</li> <li>(1) The date, place, and time of all sampling or measurements;</li> </ul>	335-3-1613 and 335-3-1614 ADEM Admin. Code
pro 335 (a)	<ul> <li>ADEM Admin. Code r. 335-3-1613 or 5-3-1614.</li> <li>Cordkeeping Requirements</li> <li>Records of required monitoring information of the source shall include the following: <ol> <li>The date, place, and time of all sampling or measurements;</li> </ol> </li> <li>(2) The date analyses were performed;</li> </ul>	335-3-1613 and 335-3-1614 ADEM Admin. Code
pro 335 (a)	<ul> <li>ADEM Admin. Code r. 335-3-1613 or 5-3-1614.</li> <li>Cordkeeping Requirements</li> <li>Records of required monitoring information of the source shall include the following: <ol> <li>The date, place, and time of all sampling or measurements;</li> <li>The date analyses were performed;</li> <li>The company or entity that performed the analyses;</li> </ol> </li> </ul>	335-3-1613 and 335-3-1614 ADEM Admin. Code
pro 335 (a)	<ul> <li>ADEM Admin. Code r. 335-3-1613 or 5-3-1614.</li> <li>Cordkeeping Requirements</li> <li>Records of required monitoring information of the source shall include the following: <ol> <li>The date, place, and time of all sampling or measurements;</li> <li>The date analyses were performed;</li> <li>The company or entity that performed the analyses;</li> <li>The analytical techniques or methods used;</li> </ol> </li> </ul>	335-3-1613 and 335-3-1614 ADEM Admin. Code :

Federally Enforceable Provisos	Regulations
21. <u>Reporting Requirements</u>	
(a) Reports to the Air Division 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 ADEM Admin. Code r. 335-3-1604(9).	ADEM Admin. Code r. 335-3-1605(c)3.
(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.	
22. Emission Testing Requirements	
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.	ADEM Admin. Code r. 335-3-105(3) and 335-3-104(1)
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.	
To avoid problems concerning testing methods and procedures, the following shall be included with the notification letter:	ADEM Admin. Code r. 335-3-104
(a) 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 tested, and the names of the persons and/or testing company that will conduct the tests.	
(b) 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).	
(c) 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.	
(d) A sketch or sketches showing sampling point locations and their relative positions to the nearest upstream and downstream gas flow disturbances.	
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.	ADEM Admin. Code r. 335-3-104

Federally Enforceable Provisos	Regulations
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.	
23. <u>Payment of Emission Fees</u>	
(a) The permittee shall remit the annual Operating Permit Fees required by ADEM Admin. Code r. 335-1-704 according to the schedule in ADEM Admin. Code r. 335-1-705.	ADEM Admin. Code r. 335-1-705
(b) The permittee shall submit its estimate of actual emissions for the previous calendar year according to the schedule in ADEM Admin. Code r. 335-1-705.	ADEM Admin. Code r. 335-1-705
24. Other Reporting and Testing Requirements	
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.	ADEM Admin. Code r. 335-3-104(1)
25. <u>Title VI Requirements (Refrigerants)</u>	
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 recycling and recovery equipment specified in 40 CFR Part 82, Subpart F.	ADEM Admin. Code r. 335-3-1605(a)
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.	
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.	
26. Chemical Accidental Prevention Provisions	
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:	40 CFR Part 68
(a) The owner or operator shall comply with the provisions in 40 CFR Part 68.	
(b) The owner or operator shall submit one of the following:	

General Permit Provisos			
Federally Enforceable Provisos	Regulations		
(1) A compliance schedule for meeting the requirements of 40 CFR Part 68 by the date provided in 40 CFR §68.10(a) or,			
(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.			
27. <u>Display of Permit</u>			
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.	ADEM Admin. Code r. 335-3-1602(2)		
28. <u>Circumvention</u>			
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 dilutes any emission of air contaminant which would otherwise violate the Division 3 rules and regulations.	ADEM Admin. Code r. 335-3-110		
29. <u>Visible Emissions</u>			
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.	ADEM Admin. Code r. 335-3-401(1)		
30. <u>Fuel Burning Equipment</u>			
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 ADEM Admin. Code r. 335-3-403.	ADEM Admin. Code r. 335-3-403		
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 ADEM Admin. Code r. 335-3-501.	ADEM Admin. Code r. 335-3-501		
31. <u>Process Industries – General</u>			
Unless otherwise specified in the Unit Specific provisos of this permit, no process may discharge particulate emissions in excess of the emissions specified in ADEM Admin. Code r. 335-3-404.	ADEM Admin. Code r. 335-3-404		

General Permit Provisos			
Federally Enforceable Provisos	Regulations		
32. Averaging Time for Emission Limits			
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.	ADEM Admin. Code r. 335-3-105		
33. <u>Open Burning</u>			
Precautions should be taken to ensure that no person shall ignite, cause to ignite, permit to be ignited, or maintain any open fire in such a manner as to cause the Department's rules and regulations applicable to open burning to be violated.	ADEM Admin. Code r. 335-3-301		
34. <u>Permit Shield</u>			
A Permit Shield exists under this operating permit in accordance with ADEM Admin. Code r. 335-3-1610 in that compliance with the conditions of this permit shall be deemed compliance with any applicable requirements as of the date of permit issuance, provided that such applicable requirements are included and are specifically identified in this operating permit.	ADEM Admin. Code r. 335-3-1610		

# Emission Unit Nos. 001 - 003 (Combustion Turbine Nos. 1 - 3) Summary Page

Description:	Three (3) 37,896 hp Rolls Royce Coberra 6562 DLE Natural Gas-fired
_	Combustion Turbines (CT-1, CT-2, and CT-3)

Permitted Operating Schedule: 20,000 Cumulative Hours/Rolling 12 consecutive months [ADEM Admin. Code r. 335-3-14-.04(9), PSD/BACT Limit]

## **Emission Limitations:**

Emission Point Nos.	Description	Pollutant	Emission Limit	Regulation
		NOx	42.0.0 lb/hr, each NO _x or 30 ppmvd @15% O ₂ dry basis, each	ADEM Admin. Code r. 335-3-1404(9)
				ADEM Admin. Code r. 335-3-1002(33)
				40 CFR Part 60, Subpart GG (NSPS)
	Three (3) 37,896 hp Rolls Royce Coberra 6562 DLE Natural Gas- fired Combustion Turbines CT-1 (Unit 1000) CT-2 (Unit 1200) CT-3 (Unit 1300)	СО	20.5 lb/hr, each or	ADEM Admin. Code r.
001			30 ppmvd @15% O ₂ dry basis, each	335-3-1404(9)
002 003		VOC	18.14 lb/hr, each or	ADEM Admin. Code r. 335-3-1404(9)
			7.2 ppmvw@15% O ₂ wet basis, each	
		PM2.5/10	3.0 lb/hr, each	ADEM Admin. Code r. 335-3-1404(9)
		F 1¥12.5/10	7.5 lb/MMScf, each	ADEM Admin. Code r. 335-3-1404(9)
			Fuel meets definition	ADEM Admin. Code r. 335-3-1002(33)
		$SO_2$	of natural gas	40 CFR Part 60, Subpart GG (NSPS)

## Emission Unit Nos. 001 - 003 (Combustion Turbine Nos. 1 - 3)

## **Unit Specific Provisos**

		Federally Enforceable Provisos	Regulations
1.	Ap	plicability	
	(a)	These units are subject to the applicable requirements of ADEM Admin. Code r. 335-3-1603, "Major Source Operating Permits."	ADEM Admin. Code r. 335-3-1603
	(b)	These units are subject to a best available control technology (BACT) emission limit to comply with the requirements of ADEM Admin. Code r. 335-3-1404, Air Permits Authorizing Construction in Clean Areas [Prevention of Significant Deterioration (PSD)].	ADEM Admin. Code r. 335-3-1404
	(c)	These units are subject to the applicable requirements of 40 CFR Part 60, Subpart GG, the Standards of Performance for Stationary Gas Turbines.	ADEM Admin. Code r. 335-3-1002(33)
2.	<u>Em</u>	ission Standards	
	(a)	The permittee shall not cause or allow emissions of nitrogen oxides (NO _x ) from each of these units in excess of 42.0 lb/hr or 30 ppmvd @ $15\%$ O ₂ , dry basis.	ADEM Admin. Code r. 335-3-1404(9) and 335-3-1002(33)
	(b)	The permittee shall not cause or allow emissions of carbon monoxide (CO) from each of these units in excess of $20.5 \text{ lb/hr}$ or 30 ppmvd @ 15% O ₂ , dry basis.	ADEM Admin. Code r. 335-3-1404(9)
	(c)	The permittee shall not cause or allow emissions of volatile organic compounds (VOC) from each of these units in excess of $18.14 \text{ lb/hr}$ or $7.2 \text{ ppmvw}$ (2) $15\% \text{ O}_2$ , wet basis.	ADEM Admin. Code r. 335-3-1404(9)
	(d)	The permittee shall not cause or allow emissions of particulate matter ( $PM_{2.5/10}$ ) from each of these units in excess of 3.0 lb/hr or 7.5 lb/MMScf.	ADEM Admin. Code r. 335-3-1404(9)
	(e)	These units are subject to the applicable emission standards of 40 CFR §60.333. The permittee shall not cause or allow emissions of sulfur dioxide (SO ₂ ) from each of these units in excess of 150 ppmvd @ 15% O ₂ OR, as an alternative, no fuel shall be burned in either of these units that contains sulfur in excess of 0.8 percent by weight (8,000 ppmw).	ADEM Admin. Code r. 335-3-1002(33)
	(f)	The cumulative operating hours for these units shall not exceed 20,000 hours/rolling 12 consecutive months.	ADEM Admin. Code r. 335-3-1404(9)

	Federally Enforceable Provisos	Regulations
(g)	The permittee shall not discharge more than one six-minute average opacity greater than 20% in any 60-minute period from these units. At no time shall the permittee discharge a six- minute average opacity of particulate emissions greater than 40% from these units.	ADEM Admin. Code r. 335-3-401(1)
3. <u>Co</u>	mpliance and Performance Test Methods and Procedures	
(a)	Compliance with the nitrogen oxides $(NO_x)$ emission rate of each unit shall be determined by EPA Reference Methods 1, 2, 3 and 4 or 19, and EPA Reference Method 7E in Appendix A of 40 CFR Part 60. Alternate test methods may be used provided prior approval by the Air Division is granted.	ADEM Admin. Code r. 335-3-105
(b)	Compliance with the carbon monoxide (CO) emission rate of each unit shall be determined by EPA Reference Methods 1, 2, 3 and 4 or 19, and EPA Reference Method 10 in Appendix A of 40 CFR Part 60. Alternate test methods may be used provided prior approval by the Air Division is granted.	ADEM Admin. Code r. 335-3-105
(c)	Compliance with the volatile organic compound (VOC) emission rate of each unit shall be determined by EPA Reference Methods 1, 2, 3 and 4 or 19, and EPA Reference Methods 25A and/or 18 in Appendix A of 40 CFR Part 60. Alternate test methods may be used provided prior approval by the Air Division is granted.	ADEM Admin. Code r. 335-3-105
(d)	If testing is required, opacity shall be determined by 40 CFR Part 60, Appendix A, Method 9.	ADEM Admin. Code r. 335-3-105

		Federally Enforceable Provisos	Regulations
4.	Em	ission Monitoring	
	(a)	Emission testing shall be conducted annually to determine compliance with the applicable emission standard(s). Testing shall be conducted once per calendar year, with no more than fourteen (14) calendar months elapsing between tests. The first emission testing conducted following the effective date of this permit shall be conducted in accordance with an approved EPA Reference Method for that pollutant. All subsequent emission testing during the permit term may be conducted using either an approved EPA Reference Method for that pollutant or utilizing a portable analyzer in accordance with a protocol/method approved in advance by the Air Division.	ADEM Admin. Code r. 335-3-1605(c)
		(i) If the results of any subsequent performance test exceed the emission limit, then semiannual performance testing shall be conducted until the unit .demonstrates compliance for two (2) consecutive testing events demonstrating emissions are less than or equal to the emission limit, at which time annual testing may resume.	
		(ii) After the first performance test conducted following the issuance of this renewal permit, no periodic monitoring will be required if the maximum periodic testing interval is semiannual and the units' operating time does not exceed 480 hours, or if the maximum periodic testing interval is annual and the units' operating time does not exceed 960 hours, whichever applies.	
	(b)	The permittee shall only fire natural gas in these units.	ADEM Admin. Code r. 335-3-1605(c)
	(c)	Within 15 days of the end of each calendar month, the permittee shall calculate the number of hours of operation of each unit for the previous month and the previous 12-month period.	ADEM Admin. Code r. 335-3-1404
	(d)	These units are subject to the applicable monitoring requirements of 40 CFR $60.334(h)(3)$ , which include demonstrating the fuel meets the definition of natural gas in 40 CFR $60.331(u)$ by maintaining a current tariff sheet specifying that the maximum total sulfur content of the fuel is 20.0 grains/100 scf or less.	ADEM Admin. Code r. 335-3-1002(33)
5.	Re	cordkeeping and Reporting Requirements	
	(a)	The permittee shall maintain records of the cumulative hours of operation on a monthly and 12-month rolling total basis.	ADEM Admin. Code r. 335-3-1404
	(b)	The permittee shall maintain records of the most current fuel tariff sheet as required by 40 CFR $(1)(3)(i)$ , on-site in a permanent form suitable for inspection for at least five (5) years (2 years on-site and 3 years off-site) from the date of generation of each record.	ADEM Admin. Code r. 335-3-1605(c)

Federally Enforceable Provisos	Regulations
(c) The permittee shall submit the results of all emission tests conducted to the Air Division within 30 days of the actual completion of the test unless the Air Division specifically approves an extension of time.	ADEM Admin. Code r. 335-3-1605(c)
(d) The permittee shall submit a Semiannual Monitoring Report, as required by General Permit Proviso No. 21(a), no later than 60 days after the end of each semiannual period (January 1 st -June 30 th and July 1 st -December 31 st ). The report shall include a statement addressing whether only natural gas was fired in these units and all emission monitoring was conducted as required during the reporting period. If all emission monitoring was not conducted, the report shall include a statement addressing whether these units were operated for production purposes during each respective reporting period. The report shall also include the monthly and 12-month totals of the hours of operation that were calculated during the reporting period.	ADEM Admin. Code r. 335-3-1605(c)

# Emission Unit No. 004 (Combustion Turbine No. 4) Summary Page

**Description:** 17,250 hp Solar Mars 100-15000S Natural Gas-fired Combustion Turbine equipped with Dry Low NO_x Combustor (CT-4)

Permitted Operating Schedule:	24 Hours	365 Days	8760 Hours
Permitted Operating Schedule:	Day	Year	Year

## **Emission Limitations:**

Emission Point No.	Description	Pollutant	Emission Limit	Regulation
		NOx	8.49 lb/hr	ADEM Admin Code r. 335-3-1404
			25 ppmvd @ 15% O2, dry basis	ADEM Admin Code r. 335-3-1002(89) 40 CFR Part 60, Subpart KKKK (NSPS)
	17,250 hp Solar Mars 100-15000S Natural Gas-fired	СО	N/A	N/A
004	Combustion Turbine equipped with Dry	VOC	N/A	N/A
	Low NO _x Combustor CT-4 (Unit 1400)	SO2	26 ng SO ₂ /J (0.060 lb SO ₂ /MMBtu) OR Fuel Sulfur Content < 20 grains per 100 standard cubic feet	ADEM Admin Code r. 335-3-1002(89) 40 CFR Part 60, Subpart KKKK (NSPS)
		PM	N/A	N/A
		HAP	N/A	N/A

## Emission Unit No. 004 (Combustion Turbine No. 4)

## Unit Specific Provisos

Federally Enforceable Provisos			Regulations
1.	<u>Ap</u>	plicability	
	(a)	This unit is subject to the applicable requirements of ADEM Admin. Code r. 335-3-1603, "Major Source Operating Permits."	ADEM Admin. Code r. 335-3-1603
	(b)	This unit is subject to a synthetic minor source emission limit to restrict its potential to emit below the applicability threshold established at ADEM Admin. Code r. 335-3-1404, Air Permits Authorizing Construction in Clean Areas [Prevention of Significant Deterioration (PSD)].	ADEM Admin. Code r. 335-3-1404
	(c)	This unit is subject to the applicable requirements of 40 CFR Part 60, Subpart KKKK, the Standards of Performance for Stationary Combustion Turbines.	ADEM Admin. Code r. 335-3-1002(89)
2.	Em	lission Standards	
	(a)	The permittee shall not cause or allow emissions of nitrogen oxides (NO _x ) from this unit in excess of 8.49 lb/hr.	ADEM Admin. Code r. 335-3-1404
	(b)	This unit is subject to the applicable emission standards of 40 CFR §60.4320. The permittee shall not cause or allow emissions of nitrogen oxides (NO _x ) from this unit in excess of 25 ppmvd @ 15% O ₂ , dry basis.	ADEM Admin. Code r. 335-3-1002(89)
	(c)	This unit is subject to the applicable emission standards of 40 CFR §60.4330. The permittee shall not burn any fuel in this turbine which contains total potential sulfur emissions in excess of 26 ng SO ₂ (0.060 lb SO ₂ /MMBtu heat input OR, as an alternative, no fuel shall be burned in this unit that contains sulfur in excess of 20 grains per 100 standard cubic feet.	ADEM Admin. Code r. 335-3-1002(89)
	(d)	The permittee shall not discharge more than one six-minute average opacity greater than 20% in any 60-minute period from this unit. At no time shall the permittee discharge a six-minute average opacity of particulate emissions greater than 40% from this unit.	ADEM Admin. Code r. 335-3-401(1)
3.	Co	mpliance and Performance Test Methods and Procedures	
	(a)	Compliance with the nitrogen oxides $(NO_x)$ emission rate of this unit shall be determined by EPA Reference Methods 1, 2, 3 and 4 or 19, and EPA Reference Method 7E in Appendix A of 40 CFR Part 60. Alternate test methods may be used provided prior approval by the Air Division is granted.	ADEM Admin. Code r. 335-3-105

	Federally Enforceable Provisos	Regulations
(b)	This unit is subject to the applicable testing and procedure requirements of 40 CFR §60.4365, which include determining the sulfur content of the fuel burned in this turbine in accordance with one of the methods described in 40 CFR §60.4365(a).	ADEM Admin. Code r. 335-3-1002(89)
(c)	If testing is required, opacity shall be determined by 40 CFR Part 60, Appendix A, Method 9.	ADEM Admin. Code r. 335-3-105
4. <u>Er</u>	nission Monitoring	
(a)	Emission testing shall be conducted annually to determine compliance with the applicable emission standard. Testing shall be conducted once per calendar year, with no more than fourteen (14) calendar months elapsing between tests. In accordance with 40 CFR §60.4340(a), if the NO _x emissions results from the initial performance test is less than 75 percent of the NO _x emission limit for the turbine, the frequency of subsequent performance tests may be reduced to once every two (2) years (no more than 26 calendar months following the previous performance test). If the results of any subsequent performance test exceeds 75 percent of the NO _x emission limits for the turbine, annual performance tests must be resumed.	ADEM Admin. Code r. 335-3-1002(89)
(b)	The permittee shall perform subsequent emission testing once per calendar year during which the unit operates for the purposes of production. The subsequent annual emission testing may be conducted using either an approved EPA Reference Method or with a portable analyzer. Periodic monitoring may be conducted concurrently with the annual or biennial EPA Reference Method test that is required by 40 CFR Part 60, Subpart KKKK. No periodic monitoring will be required if the unit does not operate for production purposes during the annual testing period.	ADEM Admin. Code r. 335-3-1605(c)
(c)	The permittee shall only fire natural gas in this unit.	ADEM Admin. Code r. 335-3-1605(c)
(d)	This unit is subject to the applicable monitoring requirements of 40 CFR §60.4365, which include monitoring the total sulfur content of the fuel being fired in the unit. The permittee may demonstrate compliance with the applicable $SO_2$ emission standard by the use of the fuel quality characteristics in a current, valid purchase contract, tariff sheet or transportation contract for the fuel which specifies that the total sulfur content is 20 grains of sulfur or less per 100 standard cubic feet.	ADEM Admin. Code r. 335-3-1002(89)
5. <u>Re</u>	cordkeeping and Reporting Requirements	
(a)	The permittee shall maintain records of fuel sulfur content on- site in a permanent form suitable for inspection for at least five (5) years (2 years on-site and 3 years off-site) from the date of generation of each record.	ADEM Admin. Code r. 335-3-1605(c)

Federally Enforceable Provisos	Regulations
(b) The permittee shall submit the results of all emission tests conducted to the Air Division within 60 days of the actual completion of the test unless the Air Division specifically approves an extension of time.	ADEM Admin. Code r. 335-3-1002(89)
(c) The permittee shall submit a Semiannual Monitoring Report, as required by General Permit Proviso No. 21(a), no later than 60 days after the end of each semiannual period (January 1 st -June 30 th and July 1 st -December 31 st ). The report shall include a statement addressing whether only natural gas was fired in this unit and all emission monitoring was conducted as required during the reporting period. If all emission monitoring was not conducted, the report shall explain the reason(s) why it was not performed.	ADEM Admin. Code r. 335-3-1605(c)

## Emission Unit Nos. 005 - 006 (Emergency Generator Unit Nos. 1 and 2) Summary Page

**Description:** Two (2) 4,259 hp Caterpillar G3616, 4-Stroke, Lean-Burn, Natural Gas-fired Emergency Reciprocating Engines (EMRG-1 and EMRG-2)

#### **Permitted Operating Schedule:**

500 hrs/yr, each

## **Emission Limitations:**

Emission Point Nos.	Description	Pollutant	Emission Limit	Regulation
		NO _x	N/A	
	Two (2) 4,259 hp Caterpillar G3616, 4-Stroke, Lean-Burn,	CON/AVOCN/A40 CFR Part 63, Subpart		
005	Natural Gas-fired Emergency Reciprocating Engines		40 CFR Part 63, Subpart	
006	EMRG-1	SO ₂	N/A	ZZZZ
	EMRG-2	РМ	N/A	
		HAP	N/A	

# Emission Unit Nos. 005 - 006 (Emergency Generator Unit Nos. 1 and 2)

## **Unit Specific Provisos**

Federally Enforceable Provisos			Regulations	
1.	<u>Ap</u>	olicability		
	(a)	These units are subject to the applicable requirements of ADEM Admin. Code r. 335-3-1603, "Major Source Operating Permits."	ADEM Admin. Code r. 335-3-1603	
	(b)	These units are subject to the applicable requirements of 40 CFR Part 63, Subpart ZZZZ, the National Emission Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines (RICE), and meet the definition for an emergency stationary RICE as defined by 40 CFR §63.6640(f). The permittee shall only operate these units as emergency stationary RICE as provided by 40 CFR §63.6640(f).	40 CFR Part 63, Subpart ZZZZ	
	(c)	These units are subject to a synthetic minor source emission limit to restrict its potential to emit below the applicability threshold established at ADEM Admin. Code r. 335-3-1404, Air Permits Authorizing Construction in Clean Areas [Prevention of Significant Deterioration (PSD)].	ADEM Admin. Code r. 335-3-1404	
2.	Em	ission Standards		
	(a)	The permittee shall not operate these units in excess of 500 hours during any consecutive 12-month period, each.	ADEM Admin. Code r. 335-3-1404	
	(b)	The permittee shall not discharge more than one six-minute average opacity greater than 20% in any 60-minute period from these units. At no time shall the permittee discharge a six- minute average opacity of particulate emissions greater than 40% from these units.	ADEM Admin. Code r. 335-3-401(1)	
	(c)	The permittee shall comply with the applicable requirements of 40 CFR §63.6603 and Table 2d to Subpart ZZZZ, which include, but may not be limited to:	40 CFR §63.6603	
		(i) Meet the following work practice requirements, except during periods of startup:		
		<ul> <li>A. Change oil and filter every 500 hours of operation or annually, whichever comes first; <i>or</i> participate in the oil analysis program per 40 CFR §63.6625(j);</li> </ul>		
		B. Inspect spark plugs every 1,000 hours of operation or annually, whichever comes first, and replace as necessary; and		
		C. Inspect all hoses and belts every 500 hours of operation or annually, whichever comes first, and replace as necessary.		

Federally Enforceable Provisos	Regulations
(ii) During periods of startup, minimize the engine's time spent at idle and minimize the engine's startup time at startup to a period needed for appropriate and safe loading of the engine, not to exceed 30 minutes, after which time the non- startup emission limitations apply.	
(iii) If a unit is operating during an emergency and it is not possible to shut down the engine in order to perform the work practice requirements on the schedule required, or if performing the work practice on the required schedule would otherwise pose an unacceptable risk under Federal, State, or local law, the work practice can be delayed until the emergency is over or the unacceptable risk under Federal, State, or local law has abated. The work practice should be performed as soon as practicable after the emergency has ended or the unacceptable risk under Federal, State, or local law has abated.	
(d) The permittee shall not operate these units except as provided in 40 CFR §63.6640(f)(1) through (f)(4), which include but may not be limited to:	40 CFR §63.6640
(i) Emergency Situations;	
<ul><li>(ii) Operate the emergency stationary RICE for the purpose of maintenance checks and readiness testing, provided that the test are recommended by Federal, State or local government, the manufacturer, the vendor, or the insurance company associated with the engines. Maintenance checks and readiness testing of the units are limited to 100 hours per year; and</li></ul>	
(iii) Operate the emergency stationary RICE up to 50 hours per year in non-emergency situations, but those 50 hours are counted toward 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 power as part of a financial arrangement with another entity.	
3. Compliance and Performance Test Methods and Procedures	
If testing is required, opacity shall be determined by 40 CFR Part 60, Appendix A, Method 9.	ADEM Admin. Code r. 335-3-105
4. Emission Monitoring	
(a) The permittee shall only fire natural gas in these units.	ADEM Admin. Code r. 335-3-1605(c)

	Federally Enforceable Provisos	Regulations
(b)	Within 15 days of the end of each calendar month, the permittee shall calculate the number of hours of operation of each unit for the previous month and the previous 12-month period.	ADEM Admin. Code r. 335-3-1404
(c)	The permittee shall operate and maintain these units according to the manufacturer's emission-related written instructions <u>or</u> develop a maintenance plan that provides for, to the extent practicable, the maintenance and operation of the engine in a manner consistent with good air pollution control practices for minimizing emissions.	40 CFR §63.6625(e)& 40 CFR §63.6640(a)
(d)	The permittee shall install a non-resettable hour meter if one is not already installed.	40 CFR §63.6625(f)
5. <u>Re</u>	cordkeeping and Reporting Requirements	
(a)	The permittee shall maintain records of hours of operation of each unit on a monthly and 12-month rolling total basis.	ADEM Admin. Code r. 335-3-1404
(b)	The permittee shall keep records of the operation and maintenance of each unit in accordance with 40 CFR §63.6655. At a minimum, these records shall include:	ADEM Admin. Code r. 335-3-1605(c) and 40 CFR §63.6655
	<ul> <li>(i) For each period of operation, the length of operation and the reason the engine was in operation during that time. For periods of operation designated as "emergency operation," the records shall reflect what classified the operation as emergency;</li> </ul>	
	<ul> <li>(ii) The total number of hours the engine was operated during a calendar year subtotaled by the reason the engine was in operation;</li> </ul>	
	(iii) The dates of each oil and filter change with the corresponding hour on the hour meter; <i>or</i> the dates of each oil analysis with the parameters that are analyzed as part of the program, the results of the analysis, and the oil changes for the engine;	
	(iv) The dates of each inspection and replacement of air cleaners, hoses, and belts with the corresponding hour on the hour meter; and	
	(v) The dates and nature of other emission-related repairs and maintenance performed.	

	Federally Enforceable Provisos	Regulations
(c)	The permittee shall maintain on-site for the life of each unit either a copy of the manufacturer's emission-related operation and maintenance instructions for the unit or the maintenance plan developed in accordance with 40 CFR §63.6625(e) for the unit.	ADEM Admin. Code r. 335-3-1605(c)
(đ)	The permittee shall maintain files of all information (including all reports and notifications) required by 40 CFR Part 63, Subparts A and ZZZZ for each unit recorded in a form suitable and readily available for expeditious inspection and review. The files shall be retained for at least 5 years following the date of each occurrence, measurement, maintenance, corrective action, report, or record. At a minimum, the most recent 2 years of data shall be retained on-site. The remaining 3 years of data may be retained off-site.	ADEM Admin. Code r. 335-3-1605(c), 40 CFR §63.6660, and 40 CFR §63.10(b)(1)
(e)	The permittee shall report to the Air Division any failure to perform a work practice on the schedule required, including instances when the work practice standard was not performed due to emergency operation or unacceptable risk under a federal, state, or local law. The permittee shall submit the report within two working days of the deviation and shall provide an explanation as to why the work practice requirement was not performed.	ADEM Admin. Code r. 335-3-1605(c) and 40 CFR §63.6640(b)
(f)	The permittee shall submit a Semiannual Monitoring Report, as required by General Permit Proviso No. 21(a), no later than 60 days after the end of each semiannual period (January 1 st -June 30 th and July 1 st -December 31 st ). The report shall include a statement addressing whether only natural gas was fired in each unit during the reporting period. If all emission monitoring was not conducted, the report shall explain the reason(s) why it was not performed. The report shall also include the monthly and 12-month totals of the hours of operation that were calculated during the reporting period.	ADEM Admin. Code r. 335-3-1605(c)