



**State of Mississippi**



**AIR POLLUTION CONTROL PERMIT**

To Construct Air Emissions Equipment

**THIS CERTIFIES**

NASA Shared Service Center, NCCIPS

9325 Cypress Loop Road

Stennis Space Center, MS

Hancock County

has been granted permission to construct air emissions equipment to comply with the emission limitations, monitoring requirements and other conditions set forth herein. This permit is issued in accordance with the provisions of the Mississippi Air and Water Pollution Control Law (Section 49-17-1 et. seq., Mississippi Code of 1972), and the regulations and standards adopted and promulgated thereunder.

**Mississippi Environmental Quality Permit Board**

**Mississippi Department of Environmental Quality**

Issued/Modified: JUN 17 2015

Expires:

Permit No. 1000-00054

Agency Interest # 53012

## Table of Contents

Subject Item Inventory.....	i
Facility Requirements.....	1
General Information.....	A-1
Other Relevant Documents:	

## To Construct Air Emissions Equipment

NASA Shared Service Center, NCCIPS

Subject Item Inventory

Permit Number:1000-00054

Activity ID No.: PER20150002

### Subject Item Inventory:

ID	Designation	Description
AI53012		Data Center for Critical Information
EQPT1	AA-007	Compression Ignition Engine used for Emergency Power Generation rated at 4680 BHP (3490 KW, 32.9 MMBtu/hr)

#### KEY

ACT = Activity

AREA = Area

CONT = Control Device

IA = Insignificant Activity

MAFO = Animal Feeding Operation

RPNT = Release Point

WDPT = Withdrawal Point

AI = Agency Interest

CAFO = Concentrated Animal Feeding Operation

EQPT = Equipment

IMPD = Impoundment

PCS = PCS

TRMT = Treatment

## To Construct Air Emissions Equipment

NASA Shared Service Center, NCCIPS

Facility Requirements

Permit Number:1000-00054

Activity ID No.: PER20150002

Page 1 of 8

### AI0000053012 Data Center for Critical Information:

#### Submittal/Action Requirements:

---

Condition No.	Condition
S-1	General Condition: The permittee shall submit certification of construction: Due within thirty (30) days of completion of construction or installation of an approved stationary source or prior to startup, whichever is earlier. The notification shall certify that construction or installation was performed in accordance with the approved plans and specifications. In the event there is any change in construction from the previously approved plans and specifications or permit, the permittee shall promptly notify MDEQ in writing. If MDEQ determines the changes are substantial, MDEQ may require the submission of a new application to construct with "as built" plans and specifications. Notwithstanding any provision herein to the contrary, the acceptance of an "as built" application shall not constitute a waiver of the right to seek compliance penalties pursuant to State Law. [11 Miss. Admin. Code Pt. 2, R. 2.5.D.]
S-2	Within fifteen (15) days of beginning actual construction, the permittee must notify DEQ in writing that construction has begun. [11 Miss. Admin.Code Pt. 2, R.2.5.C(2).]
S-3	The permittee must notify DEQ in writing when construction does not begin within eighteen (18) months of issuance or if construction is suspended for eighteen (18) months or more. [11 Miss. Admin.Code Pt. 2, R.2.5.C(4).]

#### Narrative Requirements:

##### General Condition:

---

Condition No.	Condition
T-1	General Condition: The stationary source shall be designed and constructed so as to operate without causing a violation of any Applicable Rules and Regulations or this permit, without interfering with the attainment and maintenance of State and National Ambient Air Quality Standards, and such that the emission of air toxics does not result in an ambient concentration sufficient to adversely affect human health and well-being or unreasonably and adversely affect plant or animal life beyond the stationary source boundaries. [11 Miss. Admin.Code Pt. 2, R.2.5.A.]
T-2	General Condition: Any activities not identified in the application are not authorized by this permit. [Miss. Code Ann. 49_17_29 1.b]
T-3	General Condition: The necessary facilities shall be constructed so that solids removed in the course of control of air emissions may be disposed of in a manner such as to prevent the solids from becoming windborne and to prevent the materials from entering State waters without the proper environmental permits. [Miss. Code Ann. 49_17_29]

## To Construct Air Emissions Equipment

NASA Shared Service Center, NCCIPS

Facility Requirements

Permit Number:1000-00054

Activity ID No.: PER20150002

Page 2 of 8

### AI0000053012 (continued):

#### Narrative Requirements:

##### General Condition:

---

Condition No.	Condition
T-4	General Condition: The air pollution control facilities shall be constructed such that diversion from or bypass of collection and control facilities is not needed except as provided for in Regulation 11 Miss. Admin. Code Pt.2, R. 1.10 "Air Emission Regulations for the Prevention, Abatement, and Control of Air Contaminants", Section 10. [11 Miss. Admin. Code Pt. 2, R. 1.10]
T-5	General Condition: The permittee shall allow the Mississippi Environmental Quality Commission, the Mississippi Environmental Quality Permit Board, MDEQ staff and/or their authorized representatives, upon the presentation of credentials: a. To enter upon the permittee's premises where an air emission source is located or in which any records are required to be kept under the terms and conditions of this permit; and b. At reasonable times to have access to and copy any records required to be kept under the terms and conditions of this permit, to inspect any monitoring equipment or monitoring method required in this permit, and to sample any air emission. [Miss. Code Ann. 49_17_21]
T-6	General Condition: After notice and opportunity for a hearing, this permit may be modified, suspended, or revoked in whole or in part during its term for good cause shown including, but not limited to, the following: a. Persistent violation of any terms or conditions of this permit; b. Obtaining this permit by misrepresentation or failure to disclose fully all relevant facts; or c. A change in any condition that requires either a temporary or permanent reduction or elimination of previously authorized air emissions. [11 Miss. Admin.Code Pt. 2, R.2.2.C.]
T-7	General Condition: Except for data determined to be confidential under the Mississippi Air & Water Pollution Control Law, all reports prepared in accordance with the terms of this permit shall be available for public inspection at the offices of the Mississippi Department of Environmental Quality Office of Pollution Control. [Miss. Code Ann. 49_17_39]

---

Condition No.	Condition
T-8	General Condition:This permit is for air pollution control purposes only. [11 Miss. Admin.Code Pt. 2, R.2.1.D.]
T-9	General Condition: The knowing submittal of a permit application with false information may serve as the basis for the Permit Board to void the permit issued pursuant thereto or subject the applicant to penalties for operating without a valid permit pursuant to State Law. [11 Miss. Admin.Code Pt. 2, R.2.2.B(5).]

## To Construct Air Emissions Equipment

NASA Shared Service Center, NCCIPS

Facility Requirements

Permit Number:1000-00054

Activity ID No.: PER20150002

Page 3 of 8

### AI0000053012 (continued):

#### Narrative Requirements:

Condition No.	Condition
T-10	General Condition: It is the responsibility of the applicant/permittee to obtain all other approvals, permits, clearances, easements, agreements, etc., which may be required including, but not limited to, all required local government zoning approvals or permits. [11 Miss. Admin.Code Pt. 2, R.2.1.D(6).]
T-11	General Condition: The issuance of a permit does not release the permittee from liability for constructing or operating air emissions equipment in violation of any applicable statute, rule, or regulation of state or federal environmental authorities. [11 Miss. Admin.Code Pt. 2, R.2.1.D(7).]
T-12	General Condition: It shall not be a defense for a permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of the permit, unless halting or reducing activity would create an imminent and substantial endangerment threatening the public health and safety of the lives and property of the people of this state. [11 Miss. Admin.Code Pt. 2, R.2.2.B(15)(a).]
T-13	General Condition: The permit and/or any part thereof may be modified, revoked, reopened, and reissued, or terminated for cause. Sufficient cause for a permit to be reopened shall exist when an air emissions stationary source becomes subject to Title V. The filing of a request by the permittee for a permit modification, revocation and reissuance, or termination, or of a notification of planned changes or anticipated noncompliance does not stay any permit condition. [11 Miss. Admin.Code Pt. 2, R.2.2.B(15)(b).]
T-14	General Condition: The permit does not convey any property rights of any sort, or any exclusive privilege. [11 Miss. Admin.Code Pt. 2, R.2.2.B(15)(c).]
T-15	General Condition: The permittee shall furnish to the DEQ within a reasonable time any information the DEQ may request in writing to determine whether cause exists for modifying, revoking and reissuing, or terminating the permit or to determine compliance with the permit. Upon request, the permittee shall also furnish to the DEQ copies of records required to be kept by the permit or, for information claimed to be confidential, the permittee shall furnish such records to the DEQ along with a claim of confidentiality. The permittee may furnish such records directly to the Administrator along with a claim of confidentiality. [11 Miss. Admin.Code Pt. 2, R.2.2.B(15)(d).]
T-16	General Condition: This permit shall not be transferred except upon approval of the Permit Board. [11 Miss. Admin.Code Pt. 2, R.2.16.B.]
T-17	General Condition: The provisions of this permit are severable. If any provision of the permit, or the application of any provision of the permit to any circumstances, is challenged or held invalid, the validity of the remaining permit provisions and/or portions thereof or their application to other persons or sets of circumstances, shall not be affected thereby. [11 Miss. Admin.Code Pt. 2, R.1.1.D(7).]
T-18	General Condition: The permit to construct will expire if construction does not begin within eighteen (18) months from the date of issuance or if construction is suspended for eighteen (18) months or more. [11 Miss. Admin.Code Pt. 2, R.2.5.C(1).]

## To Construct Air Emissions Equipment

NASA Shared Service Center, NCCIPS

Facility Requirements

Permit Number:1000-00054

Activity ID No.: PER20150002

Page 4 of 8

### AI0000053012 (continued):

#### Narrative Requirements:

---

Condition No.	Condition
T-19	General Condition: A new stationary source issued a Permit to Construct cannot begin operation until certification of construction by the permittee. [11 Miss. Admin.Code Pt. 2, R.2.5.D(3).]
T-20	General Condition: Except as prohibited in 11 Miss. Admin. Code Pt. 2,R. 2.5.D(7) after certification of construction by the permittee, the Permit to Construct shall be deemed to satisfy the requirement for a permit to operate until the date the application for issuance or modification of the Title V Permit or the application for issuance or modification of the State Permit to Operate, whichever is applicable, is due. This provision is not applicable to a source excluded from the requirement for a permit to operate as provided by APC-S-2, Section XIII.G. [11 Miss. Admin. Code Pt. 2, R. 2.5.D(4).]
T-21	General Condition: Except as otherwise specified in 11 Miss. Admin. Code Pt. 2, R. 2.5.D(7), the application for issuance or modification of the State Permit to Operate or the Title V Permit, whichever is applicable, is due twelve (12) months after beginning operation or such earlier date or time as specified in the Permit to Construct. The Permit Board may specify an earlier date or time for submittal of the application. Beginning operation will be assumed to occur upon certification of construction, unless the permittee specifies differently in writing. [11 Miss. Admin. Code Pt. 2, R. 2.5.D(5).]
T-22	General Condition: Except as otherwise specified in 11 Miss. Admin. Code Pt. 2, R. 2.5.D(7), upon submittal of a timely and complete application for issuance or modification of a State Permit to Operate or a Title V Permit, whichever is applicable, the applicant may continue to operate under the terms and conditions of the Permit to Construct and in compliance with the submitted application until the Permit Board issues, modifies, or denies the Permit to Operate. [11 Miss. Admin. Code Pt. 2, R. 2.5.D(6).]
T-23	General Condition: For moderate modifications that require contemporaneous enforceable emissions reductions from more than one emission point in order to net out of PSD/NSR, the applicable Title V Permit to Operate or State Permit to Operate must be modified prior to beginning operation of the modified facilities. [11 Miss. Admin.Code Pt. 2, R.2.5.D(7).]

## To Construct Air Emissions Equipment

NASA Shared Service Center, NCCIPS

Facility Requirements

Permit Number:1000-00054

Activity ID No.: PER20150002

Page 5 of 8

### AI0000053012 (continued):

#### Narrative Requirements:

---

Condition No.	Condition
T-24	<p>General Condition: Regarding compliance testing:</p> <p>(a) The results of any emissions sampling and analysis shall be expressed both in units consistent with the standards set forth in any Applicable Rules and Regulations or this permit and in units of mass per time.</p> <p>(b) Compliance testing will be performed at the expense of the permittee.</p> <p>(c) Each emission sampling and analysis report shall include but not be limited to the following:</p> <ol style="list-style-type: none"><li>1. detailed description of testing procedures;</li><li>2. sample calculation(s);</li><li>3. results; and</li><li>4. comparison of results to all Applicable Rules and Regulations and to emission limitations in the permit. [11 Miss. Admin.Code Pt. 2, R.2.6.B(3),(4)&amp;(6).]</li></ol>
T-25	<p>General Condition: The construction of the stationary source shall be performed in such a manner so as to reduce fugitive dust emissions from construction activities to a minimum. [11 Miss. Admin.Code Pt. 2, R.2.5.A(4).]</p>



## To Construct Air Emissions Equipment

NASA Shared Service Center, NCCIPS

Facility Requirements

Permit Number:1000-00054

Activity ID No.: PER20150002

### **EQPT0000000001 (AA-007) Compression Ignition Engine used for Emergency Power Generation rated at 4680 BHP (3490 KW, 32.9 MMBtu/hr):**

#### Limitation Requirements:

Condition No.	Parameter	Condition
L-1	Carbon Monoxide	Carbon Monoxide: Carbon Monoxide emissions shall not exceed 8.5 g/HP-hr. [40 CFR 60.4205(b)]
L-2	Particulate Matter	Particulate Matter: Particulate Matter shall not exceed 0.40 g/HP-hr. [40 CFR 60.4205(b)]
L-3	Particulate Matter	<p>Particulate Matter: For Emissions Point AA-007, except as otherwise specified or limited herein, the maximum permissible emission of ash and/or particulate matter from fossil fuel burning installations greater than 10 million BTU per hour heat input but less than 10,000 million BTU per hour heat input shall not exceed an emission rate as determined by the relationship:</p> $E = 0.8808 * (I)^{-0.1667}$ <p>where E is the emission rate in pounds per million BTU per hour heat input and I is the heat input in millions of BTU per hour. (Ref.: APC-S-1, Section 3.4(a)(2))                      . [APC-S-1 3.4((a)2)]</p>
L-4	Nitrogen oxides	Nitrogen oxides: Nitrogen oxide emissions shall be below 6.9 g/HP-hr. [40 CFR 60.4205(b)]
L-5	Opacity	Opacity: 40% as determined by 40 CFR 60 Appendix A. [APC-S-1 3.1(a)]
L-6		For Emission Points AA-007, the permittee shall comply with the the emission standards for new nonroad compression ignition engines in §60.4202, for all pollutants, for the same model year and maximum engine power for their 2007 model year and later emergency station compression ignition internal combustion engines. The certification emission standards for new nonroad compression ignition engines are for the same model year and maximum engine power in 40 CFR 89.112 and 40 CFR 89.113 for all pollutants. [40 CFR 60.4205(b), 40 CFR 60.4202(a)(2)]
L-7		For Emission Points AA-007, the permittee shall use diesel fuel that meets the requirements of 40 CFR 80.510(a). [40 CFR 60.4207(a)]

## To Construct Air Emissions Equipment

NASA Shared Service Center, NCCIPS

Facility Requirements

Permit Number:1000-00054

Activity ID No.: PER20150002

Page 7 of 8

### EQPT0000000001 (continued):

#### Limitation Requirements:

---

Condition No.	Parameter	Condition
L-8		Emission Point AA-007 is subject to the National Emission Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines (RICE), 40 CFR Part 63, Subpart ZZZZ. This unit is a new stationary RICE that is an emergency use unit and shall meet the requirements of this standard by meeting the requirements of 40 CFR Part 60 Subpart IIII. No further requirements of this standard apply to the emission unit. [40 CFR 63.6585, 40 CFR 63.6590(a)(2)iii, 40 CFR 63.6590(c)]
L-9		Hydrocarbon Emissions: For Emission Point AA-007, Hydrocarbon Emissions shall not exceed 1 g/HP-hr. [40 CFR 60.4205(b)]
L-10		Emission Point AA-007 is subject to and shall comply with the requirements of 40 CFR Part 60 Subpart IIII - Standards of Performance for Stationary Compression Ignition Internal Combustion Engines. [40 CFR 60.4200(2)]

#### Monitoring Requirements:

---

Condition No.	Parameter	Condition
M-1		For Emission Points AA-007, the permittee shall monitor and keep monthly records of all of the fuels combusted. These records shall consist of fuel type and quantity. Additionally, when burning diesel fuel, the permittee shall maintain records to document the sulfur content (% by weight or ppm) for fuel burned on a daily basis or for each lot or shipment received. (Ref.: APC-S-6, Section III.A.3.a(2)). [APC-S-1 III.a(2)]

## To Construct Air Emissions Equipment

NASA Shared Service Center, NCCIPS

Facility Requirements

Permit Number:1000-00054

Activity ID No.: PER20150002

Page 8 of 8

### EQPT0000000001 (continued):

#### Record-Keeping Requirements:

---

Condition No.	Condition
R-1	For Emission Points AA-007, the permitte must install a non-resettable hour meter prior to startup of each engine. Records shall be kept of the operation of the engine in emergnecy and non-emergency service that are recorded through the non-resettable hour meter. The time of operation and the reason the engine was in operation during that time must be recorded. [40 CFR 60.4209(a)]
R-2	For Emission Points AA-007, the permittee must demonstrate compliance by keeping records of engine manufacturer data indicating compliance with the standards. [40 CFR 60.4211(b)(3)]

#### Submittal/Action Requirements:

---

Condition No.	Condition
S-1	For Emission Points AA-007, the permittee shall submit an annual report of the amount of fuel used including a summary of the sulfur content of the diesel fuel used, and a summary of the engines hours of operation for the previous consecutive 12-month period. (Ref.: APC-S-6, Section III.A.3.c(1)). [APC-S-1]

#### Narrative Requirements:

---

Condition No.	Condition
T-1	For Emission Points AA-007, the permittee shall operate and maintain the stationary compression ignition internal combustion engine and control device according to the manufacturer's written instructions or procedures developed by the permittee that are approved by the engine manufacturer. In addition, the permittee may only change those settings that are permitted by the manufacturer. The permittee shall also meet the requirements of 40 CFR parts 89, 94 and/or 1068, as they apply. [40 CFR 60.4211(a)]

## GENERAL INFORMATION

NASA Shared Service Center, NCCIPS  
9325 Cypress Loop Road  
Stennis Space Center, MS  
Hancock County

### Alternate/Historic Identifiers

ID	Alternate/Historic Name	User Group	Start Date	End Date
53012	NASA Shared Services Center, NCCIPS	Official Site Name	6/16/2015	
100000054	NASA Shared Services Center, NCCIPS	Air-Title V Fee Customer	4/8/2010	
100000054	National Aeronautics and Space Administration, NCCIPS	Air-Construction	6/29/2010	6/17/2015
2804500054	NASA Shared Services Center, NCCIPS	Air-AIRS AFS	4/8/2010	
100000054	National Aeronautics and Space Administration, NCCIPS	Air-Title V Operating	10/14/2011	9/30/2016
53012	National Aeronautics and Space Administration, NCCIPS	Historic Site Name	4/8/2010	6/16/2015
100000054	NASA Shared Service Center, NCCIPS	Air-Construction	6/17/2015	

**Basin:** Coastal Streams Basin

### Location Description: