



## State of Mississippi



### AIR POLLUTION CONTROL PERMIT

#### Permit To Construct Air Emissions Equipment

#### **THIS CERTIFIES**

Mississippi Sand Solutions LLC

CJ Fisher Drive

Vicksburg, MS

Warren 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: JUL 11 2016

Expires:

Permit No. 2780-00115

Agency Interest # 69897

Table of Contents

Subject Item Inventory.....i

Facility Requirements.....1

General Information.....A-1

Other Relevant Documents:

## Permit To Construct Air Emissions Equipment

Mississippi Sand Solutions LLC

Subject Item Inventory

Permit Number:2780-00115

Activity ID No.: PER20160001

### Subject Item Inventory:

ID	Designation	Description
AI69897		Industrial Sand Drying
EQPT1	AA-001	Unloading Hopper
EQPT2	AA-002	Conveyor from Unloading Hopper to Dryer
EQPT3	AA-003	Natural Gas-fired Dryer (Equipped with Burner)
CONT1	AA-004	Baghouse (Controlling Emissions from Emission Point AA-003)
EQPT4	AA-005	Conveyor from Unloading Hopper to Dryer
EQPT5	AA-006	Conveyor from Transfer Point into Storage Building
EQPT6	AA-007	Conveyor from Transfer Point into Storage Building
EQPT7	AA-008	Conveyor from Storage Building into Trucks

### KEY

ACT = Activity

AREA = Area

CONT = Control Device

IA = Insignificant Activity

MAFO = Animal Feeding Operation

RPNT = Release Point

AI = Agency Interest

CAFO = Concentrated Animal Feeding Operation

EQPT = Equipment

IMPD = Impoundment

PCS = PCS

TRMT = Treatment

## **Permit To Construct Air Emissions Equipment**

Mississippi Sand Solutions LLC

Subject Item Inventory

Permit Number:2780-00115

Activity ID No.: PER20160001

### **KEY**

WDPT = Withdrawal Point

## Permit To Construct Air Emissions Equipment

Mississippi Sand Solutions LLC

Facility Requirements

Permit Number:2780-00115

Activity ID No.: PER20160001

Page 1 of 7

### AI0000069897 Industrial Sand Drying:

#### Limitation Requirements:

Condition No.	Parameter	Condition
L-1		For the entire facility, the permittee shall not cause, allow, or permit the discharge into the ambient air from any point source or emissions, any air contaminant of such opacity to obscure an observer's view to a degree in excess of 40%, as determined by EPA Test Method 9, 40 CFR 60, Appendix A. [11 Miss. Admin. Code Pt. 2, R. 1.3.B.]
L-2		For the entire facility, the maximum permissible emission of ash and/or particulate matter from fossil fuel burning installations of less than 10 million BTU per hour heat input shall not exceed 0.6 pounds per million BTU per hour heat input. [11 Miss. Admin. Code Pt. 2, R. 1.3.D(1)(a).]
L-3		For the entire facility, the maximum permissible emission of ash and/or particulate matter from fossil fuel burning installations of 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 $E = 0.8808 * I^{-0.1667}$ where E is the emission rate in pounds per million BTU per hour heat input and I is the heat input in millions of BTU per hour. [11 Miss. Admin. Code Pt. 2, R. 1.3.D(1)(b).]
L-4		For the entire facility, the permitte shall not allow the emission of particulate matter in total quantities in any one hour from any manufacturing process, which includes any associated stacks, vents, outlets, or combination thereof, to exceed the amount determined by the relationship $E = (4.1)*(p^{0.67})$ , where E is the emission rate in pounds per hour and p is the process weight input rate in tons per hour. (Conveyor discharge of coarse solid matter may be allowed if no nuisance is created beyond the property boundary where the discharge occurs.). [11 Miss. Admin. Code Pt. 2, R. 1.3.F(1).]
L-5		For the entire facility, the maximum discharge of sulfur oxides from any fuel burning installation in which the fuel is burned primarily to produce heat or power by indirect heat transfer shall not exceed 4.8 pounds (measured as sulfur dioxide) per million BTU heat input. [11 Miss. Admin. Code Pt. 2, R. 1.4.A(1).]
L-6		For the entire facility, the permittee is subject to and shall comply with 40 CFR Part 60, Subpart UUU - Standards of Performance for Calciners and Dryers in Mineral Industries. [40 CFR 60.730]

## Permit To Construct Air Emissions Equipment

Mississippi Sand Solutions LLC

Facility Requirements

Permit Number:2780-00115

Activity ID No.: PER20160001

Page 2 of 7

### AI0000069897 (continued):

#### Limitation Requirements:

Condition No.	Parameter	Condition
L-7		<p>The permittee shall comply with the following emission limitations on and after the date on which the initial performance test required by 40 CFR 60.8 is completed, but not later than 180 days after the initial startup, whichever date comes first. No emissions shall be discharged into the atmosphere from any affected source that:</p> <p>(a) Contains particulate matter in excess of 0.092 gram per dry standard cubic meter (g/dscm) [0.040 grain per dry standard cubic foot (gr/dscf)] for calciners and for calciners and dryers installed in series and in excess of 0.057 g/dscm (0.025 gr/dscf) for dryers; and</p> <p>(b) Exhibits greater than 10 percent opacity, unless the emissions are discharged from an affected facility using a wet scrubbing control device. [40 CFR 60.732]</p>
L-8		<p>In conducting the performance tests required in 40 CFR 60.8, the permittee shall use the test methods in 40 CFR Part 60, Appendix A or other methods and procedures as specified in this section, except as provided in 40 CFR 60.8(b). The permittee shall determine compliance with the particulate matter standards in 40 CFR 60.732 as follows:</p> <p>(a) Method 5 shall be used to determine the particulate matter concentration. The sampling time and volume for each test run shall be at least 2 hours and 1.70 dscm.</p> <p>(b) Method 9 and the procedures in 40 CFR 60.11 shall be used to determine opacity from stack emissions. [40 CFR 60.736(a) and (b)]</p>

#### Monitoring Requirements:

Condition No.	Parameter	Condition
M-1		<p>The permittee (using a dry control device to comply with the mass emission standard) shall install, calibrate, maintain, and operate a continuous monitoring system to measure and record the opacity of emissions discharged into the atmosphere from the control device. [40 CFR 60.734(a)]</p>

## Permit To Construct Air Emissions Equipment

Mississippi Sand Solutions LLC

Facility Requirements

Permit Number:2780-00115

Activity ID No.: PER20160001

Page 3 of 7

### AI0000069897 (continued):

#### Record-Keeping Requirements:

Condition No.	Condition
R-1	Records of the measurements required in 40 CFR 60.734 shall be retained by the permittee for at least two (2) years. [40 CFR 60.735(a)]

#### Submittal/Action Requirements:

Condition No.	Condition
S-1	The permittee shall submit written reports semiannually of exceedances of control device operating parameters required to be monitored by 40 CFR 60.734. For the purpose of these reports, exceedances are defined as all 6-minute periods during which the average opacity from dry control devices is greater than 10 percent. [40 CFR 60.735(c)]
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).]
S-4	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.]

## Permit To Construct Air Emissions Equipment

Mississippi Sand Solutions LLC

Facility Requirements

Permit Number:2780-00115

Activity ID No.: PER20160001

Page 4 of 7

### AI0000069897 (continued):

#### 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]
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]



## Permit To Construct Air Emissions Equipment

Mississippi Sand Solutions LLC

Facility Requirements

Permit Number:2780-00115

Activity ID No.: PER20160001

Page 5 of 7

### AI0000069897 (continued):

#### Narrative Requirements:

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).]
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.]

## Permit To Construct Air Emissions Equipment

Mississippi Sand Solutions LLC

Facility Requirements

Permit Number:2780-00115

Activity ID No.: PER20160001

Page 6 of 7

**AI0000069897 (continued):**

### Narrative Requirements:

Condition No.	Condition
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).]
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 11 Miss. Admin. Code Pt. 2, R. 2.13.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).]

## Permit To Construct Air Emissions Equipment

Mississippi Sand Solutions LLC

Facility Requirements

Permit Number:2780-00115

Activity ID No.: PER20160001

Page 7 of 7

### AI0000069897 (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>

## GENERAL INFORMATION

Mississippi Sand Solutions LLC  
CJ Fisher Drive  
Vicksburg, MS  
Warren County

### Alternate/Historic Identifiers

ID	Alternate/Historic Name	User Group	Start Date	End Date
69897	Mississippi Sand Solutions, LLC	Official Site Name	4/28/2016	
2814900115	Mississippi Sand Solutions LLC	Air-AIRS AFS (MDEQ USE ONLY)	5/24/2016	
278000115	Mississippi Sand Solutions, LLC	Air-Construction	7/11/2016	

**Basin:** Mississippi River Basin - direct dischargers to N

### Location Description: