

STATE OF MISSISSIPPI AIR POLLUTION CONTROL PERMIT

TO CONSTRUCT AIR EMISSIONS EQUIPMENT

THIS CERTIFIES THAT

Australis TMS Inc, Reese 16H-1 and McIntosh 15H-1 Production Facility
Chance Road to Access Road
Centreville, Mississippi
Amite 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

AUTHORIZED SIGNATURE
MISSISSIPPI DEPARTMENT OF ENVIRONMENTAL QUALITY

Issued: August 8, 2017

Permit No.: 0080-00052

SECTION 1. GENERAL CONDITIONS

- 1.1 This permit is for air pollution control purposes only.
(Ref.: 11 Miss. Admin. Code Pt. 2, R. 2.1.D.)
- 1.1 Any activities not identified in the application are not authorized by this permit.
(Ref.: Miss. Code Ann. 49-17-29(1)(b))
- 1.2 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.
(Ref.: 11 Miss. Admin. Code Pt. 2, R. 2.2.B(5).)
- 1.3 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.
(Ref.: 11 Miss. Admin. Code Pt. 2, R. 2.1.D(6).)
- 1.4 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.
(Ref.: 11 Miss. Admin. Code Pt. 2, R. 2.2.B(7).)
- 1.5 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.
(Ref.: 11 Miss. Admin. Code Pt. 2, R. 2.2.B(15)(a).)
- 1.6 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.
(Ref.: 11 Miss. Admin. Code Pt. 2, R. 2.2.B(15)(b).)
- 1.7 The permit does not convey any property rights of any sort, or any exclusive privilege.
(Ref.: 11 Miss. Admin. Code Pt. 2, R. 2.2.B(15)(c).)
- 1.8 The permittee shall furnish to the Department of Environmental Quality (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.

(Ref.: 11 Miss. Admin. Code Pt. 2, R. 2.2.B(15)(d).)

- 1.9 *Design and Construction Requirements:* The stationary source shall be designed and constructed so as to operate without causing a violation of an Applicable Rules and Regulations, 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.

(Ref.: 11 Miss. Admin. Code Pt. 2, R. 2.5.A(1)-(3).)

- 1.10 The necessary facilities shall be constructed to prevent any wastes or other products or substances to be placed in a location where they are likely to cause pollution of the air or waters of the State without the proper environmental permits.

(Ref.: Miss. Code Ann. 49-17-29(1) and (2))

- 1.11 *Fugitive Dust Emissions from Construction Activities:* 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.

(Ref.: 11 Miss. Admin. Code Pt. 2, R. 2.5.A(4).)

- 1.12 *General Nuisances:* The permittee shall not cause, permit, or allow the emission of particles or any contaminants in sufficient amounts or of such duration from any process as to be injurious to humans, animals, plants, or property, or to be a public nuisance, or create a condition of air pollution.

(a) The permittee shall not cause or permit the handling, transporting, or storage of any material in a manner which allows or may allow unnecessary amounts of particulate matter to become airborne.

(b) When dust, fumes, gases, mist, odorous matter, vapors, or any combination thereof escape from a building or equipment in such a manner and amount as to cause a nuisance to property other than that from which it originated or to violate any other provision of 11 Miss. Admin. Code Pt. 2, Ch. 1, the Commission may order such corrected in a way that all air and gases or air and gasborne material leaving the building or equipment are controlled or removed prior to discharge to the open air.

(Ref.: 11 Miss. Admin. Code Pt. 2, R. 1.3.C.)

1.13 *Right of Entry:* The permittee shall allow the Mississippi Department of Environmental Quality Office of Pollution Control and the Mississippi Environmental Quality Permit Board and/or their representatives upon presentation of credentials:

- (a) To enter at reasonable times 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) 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 contaminants or waste waters, fuel, process material, or other material which affects or may affect emission of air contaminants from any source.

(Ref.: Miss. Code Ann. 49-17-21)

1.14 *Permit Modification or Revocation:* After notice and opportunity for a hearing, the Permit Board may modify the permit or revoke it in whole or in part for good cause shown including, but not limited to:

- (a) Persistent violation of any of the 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 federal, state, or local laws or regulations that require either a temporary or permanent reduction or elimination of previously authorized air emission.

(Ref.: 11 Miss. Admin. Code Pt. 2, R. 2.2.C.)

1.15 *Public Record and Confidential Information:* 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.

(Ref.: Miss. Code Ann. 49-17-39)

1.16 *Permit Transfer:* This permit shall not be transferred except upon approval of the Permit Board.

(Ref.: 11 Miss. Admin. Code Pt. 2, R. 2.16.B.)

1.17 *Severability:* 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.

(Ref.: 11 Miss. Admin. Code Pt. 2, R. 2.1.D(7).)

- 1.18 *Permit Expiration:* The permit to construct will expire if construction does not begin within eighteen (18) months from the date of issuance, if construction is suspended for eighteen (18) months or more, or if construction is not completed within a reasonable time. The DEQ may extend the 18-month period upon a satisfactory showing that an extension is justified.
(Ref.: 11 Miss. Admin. Code Pt. 2, R. 2.5.C(1)., R. 2.5.C(4)., and R. 5.2.)
- 1.19 *Certification of Construction:* A new stationary source issued a Permit to Construct cannot begin operation until certification of construction by the permittee.
(Ref.: 11 Miss. Admin. Code Pt. 2, R. 2.5.D(3).)
- 1.20 *Beginning Operation:* 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.
(Ref.: 11 Miss. Admin. Code Pt. 2, R. 2.5.D(4).)
- 1.21 *Application for a Permit to Operate:* 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.
(Ref.: 11 Miss. Admin. Code Pt. 2, R. 2.5.D(5).)
- 1.22 *Operating Under a Permit to Construct:* 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.
(Ref.: 11 Miss. Admin. Code Pt. 2, R. 2.5.D(6).)
- 1.23 Except as otherwise specified herein, the permittee shall be subject to the following provisions with respect to upsets, startups, and shutdowns.
- (a) Upsets (as defined in 11 Miss. Admin. Code Pt. 2, R. 1.2.)
- (1) For an upset, the Commission may pursue an enforcement action for noncompliance with an emission standard or other requirement of an applicable rule, regulation, or permit. In determining whether to pursue enforcement action, and/or the appropriate enforcement action to take, the Commission may consider whether the source has demonstrated through

properly signed contemporaneous operating logs or other relevant evidence the following:

- (i) An upset occurred and that the source can identify the cause(s) of the upset;
 - (ii) The source was at the time being properly operated;
 - (iii) During the upset the source took all reasonable steps to minimize levels of emissions that exceeded the emission standard or other requirement of an applicable rule, regulation, or permit;
 - (iv) That within five (5) working days of the time the upset began, the source submitted a written report to the Department describing the upset, the steps taken to mitigate excess emissions or any other noncompliance, and the corrective actions taken and;
 - (v) That as soon as practicable but no later than 24 hours of becoming aware of an upset that caused an immediate adverse impact to human health or the environment beyond the source boundary or caused a general nuisance to the public, the source provided notification to the Department.
- (2) In any enforcement proceeding by the Commission, the source seeking to establish the occurrence of an upset has the burden of proof.
 - (3) This provision is in addition to any upset provision contained in any applicable requirement.
 - (4) These upset provisions apply only to enforcement actions by the Commission and are not intended to prohibit EPA or third party enforcement actions.
- (b) Startups and Shutdowns (as defined in 11 Miss. Admin. Code Pt. 2, R. 1.2.)
- (1) Startups and shutdowns are part of normal source operation. Emission limitations apply during startups and shutdowns unless source specific emission limitations or work practice standards for startups and shutdowns are defined by an applicable rule, regulation, or permit.
 - (2) Where the source is unable to comply with existing emission limitations established under the State Implementation Plan (SIP) and defined in 11 Mississippi Administrative Code, Part 2, Chapter 1, the Department will consider establishing source specific emission limitations or work practice standards for startups and shutdowns. Source specific emission limitations or work practice standards established for startups and shutdowns are subject to the requirements prescribed in 11 Miss. Admin. Code Pt. 2, R. 1.10.B(2)(a) through (e).

- (3) Where an upset, as defined in 11 Miss. Admin. Code Pt. 2, R. 1.2., occurs during startup or shutdown, see the upset requirements above.

(Ref.: 11 Miss. Admin. Code Pt. 2, R. 1.10.)

1.24 *General Duty:* All air emission equipment shall be operated as efficiently as possible to provide the maximum reduction of air contaminants.

(Ref.: 11 Miss. Admin. Code Pt. 2, R. 2.2.B(10).)

1.25 *Compliance Testing:* Regarding compliance testing:

- (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.
- (b) Compliance testing will be performed at the expense of the permittee.
- (c) Each emission sampling and analysis report shall include but not be limited to the following:
 - (1) detailed description of testing procedures;
 - (2) sample calculation(s);
 - (3) results; and
 - (4) comparison of results to all Applicable Rules and Regulations and to emission limitations in the permit.

(Ref.: 11 Miss. Admin. Code Pt. 2, R. 2.6.B(3), (4), and (6).)

SECTION 2. EMISSION POINT DESCRIPTION

The permittee is authorized to construct and operate, upon certification of construction, air emissions equipment, as described in the following table.

Emission Point	Description
AA-000	Entire Oil and Gas Production Facility
AA-001	Process Flare (FL-701)
AA-002	Treater Combo Unit Burner Stack (V-103)
AA-003	Treater Combo Unit Burner Stack (V-203)
AA-004	Pump Jack Engine (U-101) (Natural Gas Fired Reciprocating internal combustion engines, less than 500 HP)
AA-005	Pump Jack Engine (U-102) (Natural Gas Fired Reciprocating internal combustion engines, less than 500 HP)
AA-006	Pump Jack Engine (U-103) (Natural Gas Fired Reciprocating internal combustion engines, less than 500 HP)
AA-007	Pump Jack Engine (U-104) (Natural Gas Fired Reciprocating internal combustion engines, less than 500 HP)
AA-008	16,800 Gallon Crude Oil Storage Tank (S-501)
AA-009	16,800 Gallon Crude Oil Storage Tank (S-502)
AA-010	16,800 Gallon Crude Oil Storage Tank (S-503)
AA-011	16,800 Gallon Crude Oil Storage Tank (S-504)
AA-012	16,800 Gallon Crude Oil Storage Tank (S-505)
AA-013	16,800 Gallon Crude Oil Storage Tank (S-506)
AA-014	16,800 Gallon Crude Oil Storage Tank (S-507)
AA-015	16,800 Gallon Crude Oil Storage Tank (S-508)
AA-016	16,800 Gallon Crude Oil Storage Tank (S-509)
AA-017	16,800 Gallon Crude Oil Storage Tank (S-510)
AA-018	Crude Oil Loading (OiLL)
AA-019	Produced Water Loading (PWLL)

SECTION 3. EMISSION LIMITATIONS AND STANDARDS

Emission Point	Applicable Requirement	Condition Number(s)	Pollutant/Parameter	Limitation/Standard
AA-000	11 Miss. Admin. Code Pt. 2, R. 1.3.A.	3.1	Opacity	Facility-wide opacity limitations
	11 Miss. Admin. Code Pt. 2, R. 1.3.B.	3.2		
	11 Miss. Admin. Code Pt. 2, R. 2.2.B(10).	3.3	Fuel Requirements	Combust only propane or field gas
	11 Miss. Admin. Code Pt. 2, R. 1.4.B(2).	3.4	H ₂ S	One (1) grain per 100 standard cubic feet
	11 Miss. Admin. Code Pt. 2, R. 2.2.B(10).	3.5	VOC/HAP	Route all produced gas to the flare for control
	40 CFR Part 60, Subpart OOOO Standards of Performance for Crude Oil and Natural Gas Facilities for which Construction, Modification, or Reconstruction Commenced After August 23, 2011, and on or before September 18, 2015 40 CFR 60.6365(a), Subpart OOOO	3.6	VOC/HAP	Applicability
AA-001	11 Miss. Admin. Code Pt. 2, R. 1.3.D(1)(b).	3.7	PM/PM ₁₀ <i>(filterable only)</i>	$E = 0.8808 * I^{-0.1667}$
AA-002 AA-003	11 Miss. Admin. Code Pt. 2, R. 1.4.A(1).	3.8	SO ₂	4.8 lb/MMBTU
AA-002 AA-003 AA-004 AA-005 AA-006 AA-007	11 Miss. Admin. Code Pt. 2, R. 1.3.D(1)(a).	3.9	PM/PM ₁₀ <i>(filterable only)</i>	0.6 lb/MMBTU per hour heat input
AA-004 AA-005 AA-006 AA-007	40 CFR Part 63, Subpart ZZZZ National Emissions Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines 40 CFR 63.6590(c), Subpart ZZZZ	3.10	HAP	Applicability

Emission Point	Applicable Requirement	Condition Number(s)	Pollutant/Parameter	Limitation/Standard
AA-004 AA-005 AA-006 AA-007	40 CFR Part 60, Subpart JJJJ Standards of Performance for Stationary Spark Ignition Internal Combustion Engines 40 CFR 60.4230(a)(4)(iii)	3.11	HAP	Applicability

3.1 For the entire facility (Emission Point AA-000), except as otherwise specified or limited herein, the permittee shall not cause, permit, or allow the emission of smoke from a point source into the open air from any manufacturing, industrial, commercial or waste disposal process which exceeds forty (40) percent opacity. Startup operations may produce emissions which exceed 40% opacity for up to fifteen (15) minutes per startup in any one hour and not to exceed three (3) startups per stack in any twenty-four (24) hour period.

(Ref.: 11 Miss. Admin. Code Pt. 2, R. 1.3.A(1) and (2).)

3.2 For the entire facility (Emission Point AA-000), except as otherwise specified or limited herein, 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 as to obscure an observer's view to a degree in excess of 40% opacity, equivalent to that provided in Condition 3.1. This shall not apply to vision obscuration caused by uncombined water droplets.

(Ref.: 11 Miss. Admin. Code Pt. 2, R. 1.3.B.)

3.3 For the entire facility (Emission Point AA-000), the permittee shall only combust commercial grade propane or produced field gas.

(Ref.: 11 Miss. Admin. Code Pt. 2, R. 2.2.B(10).)

3.4 For the entire facility (Emission Point AA-000), the permittee shall not permit the emission of any gas stream which contains hydrogen sulfide (H₂S) in excess of one grain per 100 standard cubic feet. Gas streams containing hydrogen sulfide in excess of one grain per 100 standard cubic feet shall be incinerated at temperatures of no less than 1600 °F for a period of no less than 0.5 seconds or processed in such a manner which is equivalent to or more effective for the removal of hydrogen sulfide.

(Ref.: 11 Miss. Admin. Code Pt. 2, R. 1.4.B(2).)

3.5 For the entire facility (Emission Point AA-000), the permittee shall route all produced gas emissions to the process flare (Emission Point AA-001). Emission Point AA-001 is required to be operational as long as it is safe and practical for the flare to be in operation without the use of supplemental fuels. If the amount of produced gas reaches a level

where operation of Emission Point AA-001 is no longer safe or practical, then those emissions may be vented to the atmosphere.

(Ref.: 11 Miss. Admin. Code Pt. 2, R. 2.2.B(10).)

- 3.6 For the entire facility (Emission Point AA-000), the permittee is subject to and shall comply with all applicable requirements of 40 CFR Part 60, Subpart OOOO - Standards of Performance for Crude Oil and Natural Gas Facilities for which Construction, Modification, or Reconstruction Commenced After August 23, 2011, and on or before September 18, 2015.

(Ref.: 40 CFR 60.5365(a), Subpart OOOO)

- 3.7 For Emission Point AA-001, the maximum permissible emission of ash and/or particulate matter from fossil fuel burning installations of equal to or greater than 10 MMBTU per hour per 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 MMBTU per hour heat input and “I” is the heat input in MMBTU per hour.

(Ref.: 11 Miss. Admin. Code Pt. 2, R. 1.3.D(1)(b).)

- 3.8 For Emission Points AA-002 and AA-003, the permittee shall not discharge sulfur oxides from any fuel burning installation in which fuel is burned primarily to produce heat or power by indirect heat transfer in excess of 4.8 pounds per MMBTU heat input (measured as sulfur dioxide).

(Ref.: 11 Miss. Admin. Code Pt. 2, R. 1.4.A(1).)

- 3.9 For Emission Points AA-002, AA-003, AA-004, AA-005, AA-006, and AA-007, the permittee shall limit the particulate emissions from fossil fuel burning installations of less than 10 MMBTU/hr heat input to no more than 0.6 pounds per MMBTU per hour heat input.

(Ref.: 11 Miss. Admin. Code Pt. 2, R. 1.3.D(1)(a).)

- 3.10 For Emission Points AA-004, AA-005, AA-006, and AA-007, the permittee is subject to 40 CFR Part 63, Subpart ZZZZ, National Emission Standards for Hazardous Air Pollutants (NESHAP) for Stationary Reciprocating Internal Combustion Engines (RICE). Emission Points AA-004 and AA-005 are new RICE located at an area source of HAPs. Therefore, compliance with 40 CFR Part 63, Subpart ZZZZ shall be achieved by meeting all applicable requirements of 40 CFR Part 60, Subpart JJJJ. No further requirements apply for such engines under NESHAP Subpart ZZZZ.

(Ref.: 40 CFR 63.6585, 40 CFR 63.6590(a)(2)(iii) and (c)(1), Subpart ZZZZ)

3.11 For Emission Points AA-004, AA-005, AA-006, and AA-007, the permittee is subject to and shall comply with all applicable conditions of Standards of Performance for Stationary Spark Ignition Internal Combustion Engines, 40 CFR Part 60, Subpart JJJJ.

(Ref.: 40 CFR 60.4230(a)(4)(iv), Subpart JJJJ)

3.12

SECTION 4. WORK PRACTICES

Emission Point	Applicable Requirement	Condition Number(s)	Work Practice
AA-000	11 Miss. Admin. Code Pt. 2, R. 2.2.B(10).	4.1	Operate all equipment as efficiently as possible and perform routine maintenance

4.1 For the entire facility (Emission Point AA-000), in order to minimize the emissions of air pollutants, the permittee shall operate all air emissions equipment as efficiently as possible. Furthermore, the permittee shall perform routine maintenance on all air emissions equipment such that the equipment may be operated in an efficient manner.

(Ref.: 11 Miss. Admin. Code Pt. 2, R. 2.2.B(10).)

4.2

SECTION 5. MONITORING AND RECORDKEEPING REQUIREMENTS

Emission Point	Applicable Requirement	Condition Number(s)	Pollutant/Parameter	Monitoring/Recordkeeping Requirement
<i>This Section Has Been Intentionally Left Blank</i>				

SECTION 6. REPORTING REQUIREMENTS

Emission Point	Applicable Requirement	Condition Number(s)	Reporting Requirement
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