

**STATE OF MISSISSIPPI
AIR POLLUTION CONTROL
PERMIT**

TO CONSTRUCT AIR EMISSIONS EQUIPMENT

THIS CERTIFIES THAT

**Chevron Products Company, Pascagoula Refinery
250 Industrial Road
Pascagoula, Mississippi
Jackson 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: SEP 04 2008

Permit No.: 1280-00058

PART I

A. GENERAL CONDITIONS

1. This permit is for air pollution control purposes only. (Ref.: APC-S-2, Section I.D)
2. Any activities not identified in the application are not authorized by this permit. (Ref.: Miss. Code Ann. 49-17-29 1.b)
3. 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.: APC-S-2, Section II.B.5)
4. 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.: APC-S-2, Section I.D.6)
5. 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.: APC-S-2, Section II.B.7)
6. 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.: APC-S-2, Section II.B.15(a))
7. 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.: APC-S-2, Section II.B.15(b))
8. The permit does not convey any property rights of any sort, or any exclusive privilege. (Ref.: APC-S-2, Section II.B.15(c))
9. 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. (Ref.: APC-S-2, Section II.B.15(d))

10. 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.: APC-S-2, Section V.A)
11. Solids Removal: 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. (Ref.: Miss. Code Ann. 49-17-29)
12. Diversion and Bypass of Air Pollution Controls: 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 APC-S-1, "Air Emission Regulations for the Prevention, Abatement, and Control of Air Contaminants", Section 10. (Ref.: APC-S-1, Section 10)
13. 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.: APC-S-2, Section V.A.4)
14. 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 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 emissions. (Ref.: Miss. Code Ann. 49-17-21)
15. 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.: APC-S-2, Section II.C)

16. 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)
17. Permit Transfer: This permit shall not be transferred except upon approval of the Permit Board. (Ref.: APC-S-2, Section XVI.B)
18. 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. APC-S-2, Section I.D.7)
19. Permit Expiration: 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. (Ref.: APC-S-2, Section V.C.1)
20. Certification of Construction: A new stationary source issued a Permit to Construct cannot begin operation until certification of construction by the permittee. (Ref.: APC-S-2, Section V.D.3)
21. Beginning Operation: Except as prohibited in Part I, Condition 24 of this permit, 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. (Ref.: APC-S-2, Section V.D.4)
22. Application for a Permit to Operate: Except as otherwise specified in Part I, Condition 24 of this permit, 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.: APC-S-2, Section V.D.5)

23. Operating Under a Permit to Construct: Except as otherwise specified in Part I, Condition 24 of this permit, 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.: APC-S-2, Section V.D.6)
 24. Application Requirements for a Permit to Operate for Moderate Modifications: 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. (Ref.: APC-S-2, Section V.D.7)
 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.: APC-S-2, Section VI.B.3, 4, and 6)

B. GENERAL NOTIFICATION REQUIREMENTS

1. Within fifteen (15) days of beginning actual construction, the permittee must notify DEQ in writing that construction has begun. (Ref.: APC-S-2, Section V.C.2)
2. 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. (Ref.: APC-S-2, Section V.C.3)
3. Upon the completion of construction or installation of an approved stationary source or modification, the applicant shall notify the Permit Board that construction or installation was performed in accordance with the approved plans and specifications on file with the Permit Board. (Ref.: APC-S-2, Section V.D.1)
4. The Permit Board shall be promptly notified in writing of any change in construction from the previously approved plans and specifications or permit. If the Permit Board determines the changes are substantial, it 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. (Ref.: APC-S-2, Section V.D.2)

PART II
EMISSION LIMITATIONS AND STANDARDS

Beginning upon permit issuance, Emission Points AW-591 and AW-592 (formerly AA-591 and AA-592), Flares No. 5 and No. 6, respectively (Chevron Reference No. F-3805 and F-3806), shall become affected facilities under the New Source Performance Standards (NSPS), 40 CFR Part 60, Subpart J, and shall comply with the applicable requirements of NSPS Subparts A and J (*General Provisions and Standards of Performance for Petroleum Refineries*) for fuel gas combustion devices.

40 CFR Part 60, Subpart J – NSPS for Petroleum Refineries

Standards for Sulfur Oxides:

The permittee shall not burn in any fuel gas combustion device any fuel gas containing hydrogen sulfide (H₂S) in excess of 230 mg/dscm (0.10 gr/dscf), based on a 3-hour rolling average. The combustion in a flare of process upset gases or fuel gas that is released to the flare as a result of relief valve leakage or other emergency malfunctions is exempt from this paragraph. (Ref.: §60.104(a)(1))

Operating Requirement

For Emission Points AW-591 and AW-592, the permittee shall maintain and operate a flare gas recovery system. The flare may only combust process upset gases or fuel gas that is released to the flare as a result of relief valve leakage or other emergency malfunction.

Recordkeeping Requirement

For Emission Points AW-591 and AW-592, the permittee shall record the date, start time, and duration of any flaring event. For each flaring event, the source of the gases flared and the cause (if known) shall also be recorded.

Reporting Requirement

In accordance with Part III, Condition 2, any flaring of gases, other than process upset gases or fuel gas that is released to the flare as result of relief valve leakage or other emergency malfunction, shall be reported as a deviation of the permit requirements.

PART II
EMISSION LIMITATIONS AND STANDARDS

Beginning upon permit issuance, Emission Point AW-757 (formerly AA-757) – Flare No. 7 (Chevron Reference No. F-3807) shall become an affected facility under the New Source Performance Standards (NSPS), 40 CFR Part 60, Subpart J, and shall comply with the applicable requirements of NSPS Subparts A and J (*General Provisions and Standards of Performance for Petroleum Refineries*) for fuel gas combustion devices.

40 CFR Part 60, Subpart J – NSPS for Petroleum Refineries

Standards for Sulfur Oxides:

The permittee shall not burn in any fuel gas combustion device any fuel gas containing hydrogen sulfide (H₂S) in excess of 230 mg/dscm (0.10 gr/dscf), based on a 3-hour rolling average. The combustion in a flare of process upset gases or fuel gas that is released to the flare as a result of relief valve leakage or other emergency malfunctions is exempt from this paragraph. (Ref.: §60.104(a)(1))

Monitoring Requirements

The permittee shall install an instrument for continuously monitoring and recording the concentration (dry basis) of H₂S in fuel gases before being burned in any fuel gas combustion device. (Ref.: §60.105(a)(4))

- (i) The span value for this instrument shall be 425 mg/dscm H₂S.
- (ii) Fuel gas combustion devices having a common source of fuel gas may be monitored at only one location, if monitoring at this location accurately represents the concentration of H₂S in the fuel gas being burned.
- (iii) The performance evaluations for this H₂S monitor under §60.13(c) shall use Performance Specification 7. Method 11, 15, 15A, or 16 shall be used for conducting the relative accuracy evaluations.

Reporting Requirements

For the purposes of reports under §60.7(c), periods of excess emissions that shall be determined and reported are defined as all rolling 3-hour periods during which the average concentration of H₂S as measured by the H₂S continuous monitoring system exceeds 230 mg/dscm (0.10 gr/dscf). (Ref. §60.105(e)(3)(ii))

The permittee shall submit the required reports semiannually for each six-month period. All semiannual reports shall be postmarked by the 30th day following the end of each six-month period. The permittee shall submit a signed statement certifying the accuracy and completeness of the information contained in the report. (Ref. §60.107(e) and (f))

PART II
EMISSION LIMITATIONS AND STANDARDS

Beginning upon permit issuance, the permittee shall comply with the following emission limitation for Emission Point AH-052 (formerly AA-052), the Fluidized-bed Catalytic Cracking Unit (FCCU) 165 MMBtu/hr Process Heater (Reference No. F-1601). The FCCU 165 MMBtu/hr Process Heater is equipped with ultra-low NO_x burners to reduce emissions of nitrogen oxides. The following emission limit is in addition to any other applicable emission limits and standards and does not replace any existing limits.

Emission Limitation

Nitrogen Oxides 0.041 lb/MMBtu (HHV), based on a 365-day rolling average

Monitoring Requirement

The permittee shall use the existing NO_x Continuous Emissions Monitoring System (CEMS) to demonstrate compliance with the emission limitation above.

Recordkeeping Requirement

The permittee shall record the average daily NO_x emissions in lb/MMBtu and the rolling 365-day average NO_x emissions in lb/MMBtu, calculated daily.

PART II
EMISSION LIMITATIONS AND STANDARDS

Beginning upon permit issuance, the permittee shall comply with the following emission limitations and standards for Emission Point BF-223 (formerly AA-223), the ISO II Unit 265 MMBtu/hr topping column process heater (Reference No. F-6250), equipped with ultra-low NO_x burners to reduce emissions of nitrogen oxides. The following emission limits are in addition to any other applicable emission limits and standards and do not replace any existing limits.

Emission Limitations

Maximum Heat Input	287 MMBtu/hr (HHV), based on a 365-day rolling average
Nitrogen Oxides	0.037 lb/MMBtu (HHV), based on a 365-day rolling average

Monitoring Requirements

The permittee shall monitor the average daily heat input in MMBtu/hr.

The permittee shall calibrate, maintain, and operate continuous emissions monitoring systems (CEMS) for monitoring and recording the concentration by volume of NO_x and O₂ emissions to the atmosphere. The CEMS shall meet the applicable performance specifications required by 40 CFR Part 60, Appendix B, the applicable quality assurance procedures required in 40 CFR Part 60, Appendix F, and the requirements of 40 CFR §60.13. In lieu of the requirements of 40 CFR Part 60, Appendix F §§5.1.1, 5.1.3, and 5.1.4, Chevron may conduct either a Relative Accuracy Audit (RAA) or a Relative Accuracy Test Audit (RATA) on each CEMS at least once every three (3) years. Chevron shall conduct Cylinder Gas Audits (CGA) each calendar quarter during which a RAA or a RATA is not performed.

Recordkeeping Requirements

The permittee shall record the average daily heat input in MMBtu/hr and the rolling 365-day average heat input in MMBtu/hr, calculated daily.

The permittee shall record the average daily NO_x emissions in lb/MMBtu and the rolling 365-day average NO_x emissions in lb/MMBtu, calculated daily.

PART II
EMISSION LIMITATIONS AND STANDARDS

Beginning upon permit issuance, Emission Points AO-004 and AO-005 (formerly AA-131 and AA-141), the SRU II Tail Gas Vent and SRU III Tail Gas Vent with emissions controlled by a shared Shell Claus Offgas Treatment (“SCOT”) absorber followed by two 30.8 MMBtu/hr thermal oxidizers, shall become affected facilities under the New Source Performance Standards (NSPS), 40 CFR Part 60, Subpart J, and shall comply with the applicable requirements of NSPS Subparts A and J (*General Provisions and Standards of Performance for Petroleum Refineries*) for Claus sulfur recovery plants.

40 CFR Part 60, Subpart J – NSPS for Petroleum Refineries

Standards for Sulfur Oxides:

For a Claus sulfur recovery plant using an oxidation control system or a reduction control system followed by incineration, the permittee shall not discharge or cause the discharge of any gases into the atmosphere containing in excess of 250 ppm by volume (dry basis) of sulfur dioxide (SO₂) at zero percent excess air. (Ref.: §60.104(a)(2)(i))

Monitoring Requirements

The permittee shall install, calibrate, maintain, and operate an instrument for continuously monitoring and recording the concentration (dry basis, zero percent excess air) of SO₂ emissions into the atmosphere. The monitor shall include an oxygen monitor for correcting the data for excess air. (Ref.: §60.105(a)(4))

- (i) The span values for this monitor are 500 ppm SO₂ and 25 percent O₂.
- (ii) The performance evaluations for this SO₂ monitor under §60.13(c) shall use Performance Specification 2. Methods 6 or 6C and 3 or 3A shall be used for conducting the relative accuracy evaluations.

Reporting Requirements

For the purposes of reports under §60.7(c), periods of excess emissions that shall be determined and reported are defined as all rolling 12-hour periods during which the average concentration of SO₂ as measured by the SO₂ continuous monitoring system under §60.105(a)(5) exceeds 250 ppm (dry basis, zero percent excess air). (Ref. §60.105(e)(4)(i))

The permittee shall submit the required reports semiannually for each six-month period. All semiannual reports shall be postmarked by the 30th day following the end of each six-

month period. The permittee shall submit a signed statement certifying the accuracy and completeness of the information contained in the report. (Ref. §60.107(e) and (f))

**PART III
OTHER REQUIREMENTS**

Records:

- (1) The permittee shall maintain on-site records of all required monitoring data and support information required by this permit for a period of at least five (5) years from the date of the monitoring sample, measurement, report, or application. These records shall be made available for review upon request from DEQ personnel.

Reporting Deviations:

- (2) The permittee shall report any deviations from the permit requirements, including deviations attributable to upsets, within five (5) working days of such deviation. The report shall also include the cause of the deviation(s) and any corrective action(s) or preventive measure(s) taken. A copy of the report shall be maintained in accordance with Part III, Condition 1.