

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**

“Effluent Treatment System (ETS) Project” Moderate Modification

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: January 8, 2008

Modified: December 7, 2010; NOV 13 2012

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. NEW EMISSION POINTS EFFLUENT TREATMENT SYSTEM

Beginning upon permit issuance, the permittee is authorized to construct air emissions equipment for the emission of air contaminants from the following emission points, which constitute the new Effluent Treatment System (ETS) located in Plant 32. The ETS can treat an average of 10.3 million gallons per day (MGD) and a maximum of 15.4 MGD of wastewater from the refinery using the following processes: (a) the existing oil/water API separators, (b) feed cooling system, (c) three new equalization tanks, (d) three new dissolved nitrogen flotation (DNF) units, (e) two new activated sludge basins equipped with a coarse bubble diffused aeration system, (f) three clarifiers, (g) a biosolids management system with gravity thickeners and belt filter presses, and (h) oily residuals management.

Emission Point	Refinery ID	Description
AQ-001	---	Plant 32 Equipment Leaks
AQ-002	---	Plant 32 Wastewater
AQ-100	S-32001	Raw Effluent Collection Sump controlled by a carbon canister
AQ-110	T-32110	7,500,000-Gallon, External Floating Roof, Equalization Tank with Skimmer
AQ-120	T-32120	7,500,000-Gallon, External Floating Roof, Equalization Tank with Skimmer
AQ-130	T-32130	7,500,000-Gallon, External Floating Roof, Equalization Tank with Skimmer
AQ-200	T-32200	DNF Unit controlled by a carbon canister
AQ-220	T-32220	3,000-Gallon, Fixed Roof, DNF Float Collection Tank controlled by a carbon canister
AQ-250	T-32250	DNF Unit controlled by a carbon canister
AQ-300	T-32300	DNF Unit controlled by a carbon canister
AQ-390	T-32390	3,000-Gallon, Fixed Roof, DNF Bottoms Tank controlled by a carbon canister
AQ-400	T-32400	27,000-Gallon, Fixed Roof, DNF Effluent Tank controlled by a carbon canister
AQ-460	T-32460	7,017,000-Gallon, Aeration Basin open to the atmosphere
AQ-470	T-32470	7,017,000-Gallon, Aeration Basin open to the atmosphere
**	T-32480	12,000-Gallon, Clarifiers Flocculator/Splitter Tank open to the atmosphere
**	T-32510	1,984,000-Gallon, Secondary Clarifier open to the atmosphere
**	T-32520	1,984,000-Gallon, Secondary Clarifier open to the atmosphere
**	T-32530	1,984,000-Gallon, Secondary Clarifier open to the atmosphere
**	T-32540	47,000-Gallon, Clarifier Effluent Tank open to the atmosphere
**	T-32550	6,000-Gallon, Fixed Roof, Clarifier Scum Tank
**	T-32610	74,000-Gallon, Sludge Thickener Tank open to the atmosphere
**	T-32620	74,000-Gallon, Sludge Thickener Tank open to the atmosphere
**	T-32650	54,000-Gallon, Sludge Holding Tank open to the atmosphere
**	T-32660	54,000-Gallon, Sludge Holding Tank open to the atmosphere
**	T-32720	611-Gallon, Fixed Roof, DNF Dilute Polymer Tank
**	T-32722	2,650-Gallon, Fixed Roof, DNF Neat Polymer Tank
**	T-32750	2,650-Gallon, Fixed Roof, Clarifier Dilute Polymer Tank

Emission Point	Refinery ID	Description
**	T-32752	5,183-Gallon, Fixed Roof, Clarifier Neat Polymer Tank
**	T-32760	611-Gallon, Fixed Roof, Belt Filter Dilute Polymer Tank
**	T-32762	1,425-Gallon, Fixed Roof, Belt Filter Neat Polymer Tank
AQ-3200	--	Oily Residuals Separation System
AQ-3203	D-3203	104,000-Gallon, Fixed Roof, DNF Float/Bottoms Tank, controlled by a carbon system
AQ-3204	D-3204	104,000-Gallon, Fixed Roof, DNF Float/Bottoms Tank, controlled by a carbon system
AQ-3205	T-3205	20,000-Gallon, Fixed Roof, Coker Slurry Tank, controlled by a carbon system
CC-102	S-95002	Sulfur Area Sump

** These tanks will not be assigned an Emission Point ID because they will be considered insignificant activities for Title V purposes.

The air emissions equipment shall be constructed to comply with the design criteria specified in the application to construct and the requirements specified below.

LEAK DETECTION AND REPAIR (LDAR) REQUIREMENTS

For Emission Point AQ-001, the permittee shall monitor the valves and pumps in VOC service (as defined in §60.481a) for equipment leaks of VOC. The permittee shall use the following internal leak definitions for components in light liquid or gas/vapor service (as defined in §60.485a(e)), unless specified more stringent in an applicable federal standard:

- (a) No greater than 500 ppmv VOC for each valve.
- (b) No greater than 2,000 ppmv VOC for each pump.

LDAR Monitoring:

For Plant 32, the permittee shall monitor any valves and pumps in light liquid or gas/vapor VOC service for leaks once per quarter using an approved gas analyzer conforming to the requirements of §60.485a(a)-(b). (Those valves meeting the definition of inaccessible or unsafe-to-monitor, as defined in §60.482-7a(g), are excluded from this requirement.)

Any equipment found to be leaking shall be tagged and repaired within 15 days after the leak is found. If the repair would require a unit shutdown, the repair may be delayed until a scheduled shutdown is identified for such repair. Repaired components shall be re-monitored within 15 days of being placed back into service.

For any equipment designated for no detectable emissions, the permittee shall conduct a compliance test in accordance with §60.485a(c).

LDAR Recordkeeping:

The permittee shall record the following information as part of the existing refinery-wide Leak Detection and Repair (LDAR) program.

1. The following information shall be recorded in a log that shall be kept in a readily accessible location and updated as needed:
 - a. A list of identification numbers for all equipment subject to the monitoring requirements above.
 - b. A list of identification numbers for any equipment designated as unsafe-to-monitor and explanation of why each is unsafe-to-monitor.
 - c. A list of identification numbers for any equipment designated for no detectable emissions and the dates of each compliance test, the background level measured during each compliance test, and the maximum instrument reading measured during each compliance test.
2. The permittee shall record the following information for each monitoring event in a log that shall be kept for two (2) years in a readily accessible location:
 - a. Monitoring instrument identification.
 - b. Operator identification.
 - c. Equipment identification.
 - d. Date of monitoring.
 - e. Instrument reading.
3. When a leak is detected, the permittee shall attach a weatherproof and readily visible identification, marked with the equipment identification number. This identification may be removed after the component has been repaired and re-monitored.
4. When a leak is detected, the permittee shall record the following information in a log that shall be kept for two (2) years in a readily accessible location:
 - a. The instrument and operator identification numbers and the equipment identification number.
 - b. The date the leak was detected and the dates of each attempt to repair the leak.
 - c. Repair methods applied in each attempt to repair the leak.

- d. Maximum instrument reading measured after each repair attempt.
- e. "Repair delayed" and reason for the delay if a leak is not repaired within 15 calendar days after discovery of the leak.
- f. The signature of the owner or operator (or designate) whose decision it was that repair could not be effected without a process shutdown.
- g. The expected date of successful repair of the leak if a leak is not repaired within 15 days.
- h. Dates of process unit shutdowns that occur while the equipment is unrepaired.
- i. The date of successful repair of the leak.

LDAR Reporting Requirements:

The permittee shall submit semiannual reports containing the following information. This information shall be submitted as part of the existing LDAR semiannual reports submitted by the refinery.

- 1. Process unit identification.
- 2. For each quarter during the semiannual period, the type and number of components for which leaks were detected.
- 3. The facts that explain each delay or repair and, where appropriate, why a process unit shutdown was technically infeasible.
- 4. Dates of process unit shutdowns which occurred within the semiannual reporting period.

NESHAP Subpart FF – Benzene Waste Operations

For Emission Points AQ-002, AQ-100, AQ-110, AQ-120, AQ-130, AQ-200, AQ-250, AQ-300, AQ-220, AQ-390, AQ-400, AQ-460, AQ-470, AQ-3200, AQ-3203, AQ-3204, and AQ-3205, the permittee is subject to and shall comply with the applicable requirements of the *National Emission Standard for Benzene Waste Operations* (40 CFR Part 61, Subpart FF).

- (a) The provisions of this subpart apply to owners and operators of chemical manufacturing plants, coke by-product recovery plants, and petroleum refineries.

- (b) The provisions of this subpart apply to owners and operators of hazardous waste treatment, storage, and disposal facilities that treat, store, or dispose of hazardous waste generated by any facility listed in paragraph §61.340(a). The waste streams at hazardous waste treatment, storage, and disposal facilities subject to the provisions of this subpart are the benzene-containing hazardous waste from any facility listed in listed in §61.340(a). A hazardous waste treatment, storage, and disposal facility is a facility that must obtain a hazardous waste management permit under subtitle C of the Solid Waste Disposal Act.
- (c) At each facility identified in §61.340(a) or §61.340(b), the following waste is exempt from the requirements of this subpart:
1. Waste in the form of gases or vapors that is emitted from process fluids.
 2. Waste that is contained in a segregated stormwater sewer system.
- (d) At each facility identified in §61.340(a) or §61.340(b), any gaseous stream from a waste management unit, treatment process, or wastewater treatment system routed to a fuel gas system, as defined in §61.341, is exempt from this subpart. No testing, monitoring, recordkeeping, or reporting is required under this subpart for any gaseous stream from a waste management unit, treatment process, or wastewater treatment unit routed to a fuel gas system.

(Ref.: 40 CFR 61.340)

BWON VOC Monitoring:

Beginning with the Raw Effluent Collection Sump (Emission Point AQ-100) and including all emission units downstream of AQ-100 that are required to comply with Subpart FF (BWON) by installing and maintaining a control device (e.g., a carbon canister), the permittee shall determine the concentration level of organic compounds in the exhaust vent stream from the control device, in addition to or in lieu of determining the benzene concentration, as required by 40 CFR 61.354.

H₂S MONITORING PLAN

In order to demonstrate compliance with the H₂S standard of one grain per 100 standard cubic feet (1 gr/100 scf) found in APC-S-1, Section 4.2(b), the permittee shall develop a monitoring plan for ensuring compliance with this standard. The monitoring plan shall address the H₂S emission sources to be tested, the rationale for selecting these sources, the test/monitoring method(s) to be used, the frequency of the testing/monitoring, and the threshold at which corrective action will be taken to reduce H₂S emissions.

RECORDKEEPING AND REPORTING REQUIREMENT

The permittee shall maintain records of the average yearly flow in MGD calculated for each consecutive 12-month period and shall report this average flow for each 12-month period in the semiannual reporting period. The flow shall be continuously monitored at the main sump feeding the Effluent Treatment Plant.

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.

Semiannual Reports:

- (3) The permittee shall submit semiannual reports of the information specified in herein by July 31 and January 31 for the preceding six-month period. All instances of deviations from permit requirements must be clearly identified in such reports and a responsible official must certify all required reports.

MACT Subpart CC – Petroleum Refineries

For Plant 32, the permittee is subject to and shall comply with the applicable requirements of the *National Emission Standards for Hazardous Air Pollutants from Petroleum Refineries* (40 CFR Part 63, Subpart CC) and the applicable requirements of the *General Provisions* (40 CFR Part 63, Subpart A) as summarized in Table 6 of the appendix to 40 CFR Part 63, Subpart CC.

- (a) This subpart applies to petroleum refining process units and to related emission points that are specified in paragraphs §63.640(c)(5) through (c)(7) that are located at a plant site that meet the criteria in §63.640(a)(1) and (a)(2). (Ref.: §63.640(a))
- (b) For the purpose of this subpart, the affected source shall comprise all emission points, in combination, listed in §63.640(c)(1) through (c)(7) of this section that are located at a single refinery plant site. (Ref.: §63.640(c))
- (c) The affected source subject to this subpart does not include the emission points listed in §63.640(d)(1) through (d)(5). (Ref.: §63.640(d))