

# STATE OF MISSISSIPPI AIR POLLUTION CONTROL PERMIT

AND PREVENTION OF SIGNIFICANT  
DETERIORATION AUTHORITY  
TO CONSTRUCT AIR EMISSIONS EQUIPMENT  
**THIS CERTIFIES THAT**

ChevronTexaco Products Company  
Pascagoula Refinery  
250 Industrial Road  
Pascagoula, Mississippi  
Jackson County

*"Clean Fuels Project (CFP)"*

has been granted permission to construct air emissions equipment to comply with 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 and under authority granted by the Environmental Protection Agency under 40 CFR 52.01 and 52.21.

**MISSISSIPPI ENVIRONMENTAL QUALITY PERMIT BOARD**



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**AUTHORIZED SIGNATURE**

**MISSISSIPPI DEPARTMENT OF ENVIRONMENTAL QUALITY**

Issued: June 12, 2001

Modified: January 6, 2003; April 14, 2003; August 20, 2004;

**OCT 11 2005**

Permit No.: 1280-00058

**PART I  
GENERAL CONDITIONS**

- 1. Any activities not identified in the application are not authorized by this permit.**
- 2. All air pollution control facilities shall be designed and constructed such as to allow proper operation and maintenance of the facilities.**
- 3. 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.**
- 4. 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.**
- 5. The construction of facilities shall be performed in such a manner as to reduce both point source and fugitive dust emissions to a minimum.**
- 6. 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.**
- 7. After notice and opportunity for a hearing, this permit may be modified, suspended, or revoked in whole or in part during its term for cause including, but not limited to:**
  - a. 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 authorized air emissions.**

8. 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.
9. The issuance of this permit does not convey any property rights in either real or personal property, or any exclusive privileges, nor does it authorize any injury to private property or any invasion of personal rights, nor any infringement of Federal, State or local laws or regulations.
10. Nothing herein contained shall be construed as releasing the permittee from any liability for damage to persons or property by reason of the installation, maintenance, or operation of the air cleaning facility, or from compliance with the applicable statutes of the State, or with local laws, regulations, or ordinances.
11. This permit may only be transferred upon approval of the Mississippi Environmental Quality Permit Board.
12. This permit is for air pollution control purposes only.
13. Approval to construct will expire should construction not begin within eighteen (18) months of the issuance of this permit, or should construction be suspended for eighteen (18) months.
14. Prior to startup of air emissions equipment at this source, the permittee must submit certification that construction was completed in accordance with the approved plans and specifications.

**PART II**  
**EMISSION LIMITATIONS AND MONITORING REQUIREMENTS**

Beginning January 6, 2003, the permittee is authorized to construct air emissions equipment for the emission of air contaminants from Emission Point AA-011, the Crude I, 231 MMBTUH Vacuum Column Furnace(Reference No. F-1102).

The air emissions equipment shall be constructed to comply with the emission limitations and monitoring requirements specified below.

**EMISSION LIMITATIONS**

|                    |   |
|--------------------|---|
| Particulate Matter | 2.58 lbs/hr and 7.54 tons/year, as determined by EPA Test Methods 1-5, 40 CFR 60, Appendix A.   |
| PM <sub>10</sub>   | 2.58 lbs/hr and 7.54 tons/year as determined by EPA Test Method 201 or 201A in conjunction with Test Method 202, 40 CFR 51, Appendix M. |
| Sulfur Dioxide     | 14.20 lbs/hr and 35.84 tons/year, as determined by EPA Test Method 6, 40 CFR 60, Appendix A.  |
| Nitrogen Oxides    | 33.97 lbs/hr and 99.19 tons/year, as determined by EPA Test Method 7, 40 CFR 60, Appendix A.  |
| Carbon Monoxide    | 62.53 lbs/hr and 73.04 tons/year, as determined by EPA Test Method 10, 40 CFR 60, Appendix A.   |
| Sulfuric Acid      | 0.22 lbs/hr and 0.55 tons/year, as determined by EPA Test Method 8, 40 CFR 60, Appendix A.  |
| Opacity            | 40%, as determined by EPA Test Method 9, 40 CFR 60, Appendix A.   |

All test methods specified above shall be those versions, or their approved equivalents, which are in effect January 6, 2003.

**FUEL RESTRICTIONS**

Fuels other than Natural Gas and Refinery Fuel Gas (RFG) are prohibited.

**TEST METHODS AND PROCEDURES**

Within 60 days after achieving the maximum production rate at which Emission Point AA-011 will be operated, but no later than 180 days of any physical (or operational) change to the vacuum column furnace (see Part III, Notification Requirements, item 11), the permittee shall demonstrate compliance with the particulate matter (PM/PM10), sulfur dioxide (SO<sub>2</sub>), carbon monoxide (CO), nitrogen oxide (NO<sub>x</sub>) and sulfuric acid emission limitation by stack testing as specified below and biennially thereafter.

- (1) Particulate Matter utilizing EPA Reference Methods 1 - 5
- (2) Sulfur Dioxide utilizing EPA Reference Method 6
- (3) Sulfuric Acid utilizing EPA Reference Method 8
- (4) Carbon Monoxide utilizing EPA Reference Method 10
- (5) Nitrogen Oxides utilizing EPA Reference Method 7, 7A or 7E

For the purpose of demonstrating compliance, the permittee shall operate the emission unit at its maximum capacity.

A pretest conference at least thirty (30) days prior to the scheduled test date is needed to ensure that all test methods and procedures are acceptable to the Office of Pollution Control. Also, the Office of Pollution Control must be notified prior to the scheduled test date. At least ten (10) days notice shall be given so that an observer may be scheduled to witness the test(s).

### **MONITORING OF OPERATIONS**

The permittee shall record and maintain records of the amounts of each fuel combusted during each day.

The permittee shall collect weekly fuel samples in an as-fired condition and analyze for sulfur content.

The permittee shall install, calibrate, maintain, and operate an instrument for continuously monitoring and recording the concentration by volume (dry basis, zero percent excess air) of SO<sub>2</sub> emissions into the atmosphere. The monitor shall include an oxygen monitor for correcting the data for excess air.

In place of the SO<sub>2</sub> monitor, an instrument for continuously monitoring and recording the concentration (dry basis) of H<sub>2</sub>S in fuel gases before being burned in a fuel gas combustion device may be used.

- (i) The span value for this instrument is 0.186 grains/dry standard cubic feet (gr/dscf) H<sub>2</sub>S.
- (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 H<sub>2</sub>S in the fuel gas being burned.

- (iii) The performance evaluations for this H<sub>2</sub>S monitor under § 60.13(c) shall use Performance Specification 7. Method 11 shall be used for conducting the relative accuracy evaluations.

**PART II**  
**EMISSION LIMITATIONS AND MONITORING REQUIREMENTS**

Beginning January 6, 2003, the permittee is authorized to construct air emissions equipment for the emission of air contaminants from Emission Point AA-012, the Crude I, 380.6 MMBTUH Atmospheric Column Furnace (Reference No. Furnace F-1101).

The air emissions equipment shall be constructed to comply with the emission limitations and monitoring requirements specified below.

**EMISSION LIMITATIONS**

|                    |  |
|--------------------|--|
| Particulate Matter | 4.25 lbs/hr and 12.42 tons/year, as determined by EPA Test Methods 1-5, 40 CFR 60, Appendix A.   |
| PM <sub>10</sub>   | 4.25 lbs/hr and 12.42 tons/year as determined by EPA Test Method 201 or 201A in conjunction with Test Method 202, 40 CFR 51, Appendix M. |
| Sulfur Dioxide     | 28.58 lbs/hr and 83.46 tons/year, as determined by EPA Test Method 6, 40 CFR 60, Appendix A.   |
| Nitrogen Oxides    | 55.97 lbs/hr and 163.43 tons/year, as determined by EPA Test Method 7, 40 CFR 60, Appendix A.  |
| Carbon Monoxide    | 103.03 lbs/hr and 120.34 tons/year, as determined by EPA Test Method 10, 40 CFR 60, Appendix A.  |
| Sulfuric Acid      | 0.44 lbs/hr and 1.29 tons/year, as determined by EPA Test Method 8, 40 CFR 60, Appendix A.   |
| Opacity            | 40%, as determined by EPA Test Method 9, 40 CFR 60, Appendix A.  |

All test methods specified above shall be those versions, or their approved equivalents, which are in effect January 6, 2003.

**FUEL RESTRICTIONS**

Fuels other than Vacuum Column Overhead Gas, Natural Gas and Refinery Fuel Gas (RFG) are prohibited.

The permittee shall limit operation of Emission Point AA-012 to an annual capacity factor less than 10 percent (0.10) for vacuum column overhead gas.

### **TEST METHODS AND PROCEDURES**

Within 60 days after achieving the maximum production rate at which Emission Point AA-012 will be operated, but no later than 180 days of any physical (or operational) change to the Crude I, atmospheric column furnace (see Part III, Notification Requirements, item 11), the permittee shall demonstrate compliance with the particulate matter (PM/PM10), sulfur dioxide (SO<sub>2</sub>), carbon monoxide (CO), nitrogen oxide (NO<sub>x</sub>) and sulfuric acid emission limitation by stack testing as specified below and biennially thereafter.

- (1) Particulate Matter utilizing EPA Reference Methods 1 - 5
- (2) Sulfur Dioxide utilizing EPA Reference Method 6
- (3) Sulfuric Acid utilizing EPA Reference Method 8
- (4) Carbon Monoxide utilizing EPA Reference Method 10
- (5) Nitrogen Oxides utilizing EPA Reference Method 7, 7A or 7E.

For the purpose of demonstrating compliance, the permittee shall operate the emission unit at its maximum capacity.

A pretest conference at least thirty (30) days prior to the scheduled test date is needed to ensure that all test methods and procedures are acceptable to the Office of Pollution Control. Also, the Office of Pollution Control must be notified prior to the scheduled test date. At least ten (10) days notice shall be given so that an observer may be scheduled to witness the test(s).

### **CONTROL DEVICE REQUIREMENTS**

For Emission Point AA-012, the O/H vent scrubber shall be operated at all times when emissions may be vented to it.

### **MONITORING REQUIREMENTS**

The permittee shall record and maintain records of the amounts of each fuel combusted during each day.

The permittee shall calculate and maintain a record of the annual capacity factor individually for vacuum column overhead gas, refinery fuel gas and natural gas. The annual capacity factor is determined on a 12-month rolling average basis with a new annual

capacity factor calculated at the end of each calendar month. The permittee shall calculate the sulfur dioxide and sulfuric acid emission rates if the vacuum column overhead gas equals or exceeds ten percent (0.10) of the unit's annual capacity factor.

The permittee shall collect weekly fuel samples in an as-fired condition analyze for sulfur content.

The permittee shall install, calibrate, maintain, and operate an instrument for continuous measurement of the scrubber liquid flowrate and the maximum vacuum column overhead gas flowrate. The monitoring devices shall be calibrated on an annual basis in accordance with manufacturers' instructions.

The permittee shall install, calibrate, maintain, and operate an instrument for continuously monitoring and recording the concentration by volume (dry basis) of H<sub>2</sub>S in the refinery fuel gas before being burned in the fuel gas combustion device.

- (i) The span value for this instrument is 0.186 grains/dry standard cubic feet (gr/dscf) H<sub>2</sub>S.
- (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 H<sub>2</sub>S in the fuel gas being burned.
- (iii) The performance evaluations for this H<sub>2</sub>S monitor under § 60.13(c) shall use Performance Specification 7. Method 11 shall be used for conducting the relative accuracy evaluations.

**PART II**  
**EMISSION LIMITATIONS AND MONITORING REQUIREMENTS**

Beginning June 12, 2001, the permittee is authorized to construct air emissions equipment for the emission of air contaminants from IsoMax I, Emission Point AA-021, a 90 MMBTUH Process Heater and two (2) 17.5 MMBTUH Process Heaters (Reference Nos. F-1201, F-1301 & F-1302, respectively). Fuel combustion emissions generated are vented through a single exhaust stack.

The air emissions equipment shall be constructed to comply with the emission limitations and monitoring requirements specified below.

**EMISSION LIMITATIONS**

|                |   |
|----------------|---|
| Sulfur Dioxide | 7.69 lbs/hr and 19.38 tons/year, as determined by EPA Test Method 6, 40 CFR 60, Appendix A. |
| Sulfuric Acid  | 0.12 lbs/hr and 0.30 tons/year, as determined by EPA Test Method 8, 40 CFR 60, Appendix A.  |
| Opacity        | 40% as determined by EPA Test Method 9, 40 CFR 60, Appendix A.                              |

All test methods specified above shall be those versions, or their approved equivalents, which are in effect June 12, 2001.

**FUEL RESTRICTIONS**

Fuels other than Natural Gas and Refinery Fuel Gas (RFG) are prohibited.

**MONITORING REQUIREMENTS**

The permittee shall record and maintain records of the amounts of each fuel combusted during each day.

The permittee shall collect weekly fuel samples in an as-fired condition and analyze for sulfur content.

The permittee shall install, calibrate, maintain, and operate an instrument for continuously monitoring and recording the concentration by volume (dry basis, zero percent excess air) of SO<sub>2</sub> emissions into the atmosphere. The monitor shall include an oxygen monitor for correcting the data for excess air.

In place of the SO<sub>2</sub> monitor, an instrument for continuously monitoring and recording the concentration (dry basis) of H<sub>2</sub>S in fuel gases before being burned in a fuel gas combustion device may be used.

- (i) The span value for this instrument is 0.186 grains/dry standard cubic feet (gr/dscf) H<sub>2</sub>S.
- (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 H<sub>2</sub>S in the fuel gas being burned.
- (iii) The performance evaluations for this H<sub>2</sub>S monitor under § 60.13(c) shall use Performance Specification 7. Method 11 shall be used for conducting the relative accuracy evaluations.

**PART II**  
**EMISSION LIMITATIONS AND MONITORING REQUIREMENTS**

Beginning June 12, 2001, the permittee is authorized to construct air emissions equipment for the emission of air contaminants from IsoMax I, Emission Point AA-024, a 100 MMBTUH Process Heater (Reference No. F-1304).

The air emissions equipment shall be constructed to comply with the emission limitations and monitoring requirements specified below.

**EMISSION LIMITATIONS \***

|                    |   |
|--------------------|---|
| Particulate Matter | 0.409 lbs per MMBtu heat input  |
| Sulfur Dioxide     | 6.15 lbs/hr and 15.51 tons/year, as determined by EPA Test Method 6, 40 CFR 60, Appendix A. |
| Sulfuric Acid      | 0.10 lbs/hr and 0.24 tons/year, as determined by EPA Test Method 8, 40 CFR 60, Appendix A.  |
| Opacity            | 40% as determined by EPA Test Method 9, 40 CFR 60, Appendix A.                              |

All test methods specified above shall be those versions, or their approved equivalents, which are in effect June 12, 2001.

\* The particulate matter emission limitation established in a previous Permit to Construct.

**FUEL RESTRICTIONS**

Fuels other than Natural Gas and Refinery Fuel Gas (RFG) are prohibited.

**MONITORING REQUIREMENTS**

The permittee shall record and maintain records of the amounts of each fuel combusted during each day.

The permittee shall collect weekly fuel samples in an as-fired condition and analyze for sulfur content.

The permittee shall install, calibrate, maintain, and operate an instrument for continuously monitoring and recording the concentration by volume (dry basis, zero percent excess air) of SO<sub>2</sub> emissions into the atmosphere. The monitor shall include an oxygen monitor for correcting the data for excess air.

In place of the SO<sub>2</sub> monitor, an instrument for continuously monitoring and recording the concentration (dry basis) of H<sub>2</sub>S in fuel gases before being burned in a fuel gas combustion device may be used.

- (i) The span value for this instrument is 0.186 grains/dry standard cubic feet (gr/dscf) H<sub>2</sub>S.
- (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 H<sub>2</sub>S in the fuel gas being burned.
- (iii) The performance evaluations for this H<sub>2</sub>S monitor under § 60.13(c) shall use Performance Specification 7. Method 11 shall be used for conducting the relative accuracy evaluations.

**PART II**  
**EMISSION LIMITATIONS AND MONITORING REQUIREMENTS**

Beginning June 12, 2001, the permittee is authorized to construct air emissions equipment for the emission of air contaminants from IsoMax I, Emission Point AA-025, a 140 MMBTUH Process Heater (Reference No. F-1305).

The air emissions equipment shall be constructed to comply with the emission limitations and monitoring requirements specified below.

**EMISSION LIMITATIONS\***

|                    |   |
|--------------------|---|
| Particulate Matter | 0.387 lbs per MMBtu heat input.   |
| Sulfur Dioxide     | 8.61 lbs/hr and 21.71 tons/year, as determined by EPA Test Method 6, 40 CFR 60, Appendix A. |
| Sulfuric Acid      | 0.13 lbs/hr and 0.34 tons/year, as determined by EPA Test Method 8, 40 CFR 60, Appendix A.  |
| Opacity            | 40% as determined by EPA Test Method 9, 40 CFR 60, Appendix A.                              |

All test methods specified above shall be those versions, or their approved equivalents, which are in effect June 12, 2001.

\* The particulate matter emission limitation established in a previous Permit to Construct.

**FUEL RESTRICTIONS**

Fuels other than Natural Gas and Refinery Fuel Gas (RFG) are prohibited.

**MONITORING REQUIREMENTS**

The permittee shall record and maintain records of the amounts of each fuel combusted during each day.

The permittee shall collect weekly fuel samples in an as-fired condition and analyze for sulfur content.

The permittee shall install, calibrate, maintain, and operate an instrument for continuously monitoring and recording the concentration by volume (dry basis, zero percent excess air) of SO<sub>2</sub> emissions into the atmosphere. The monitor shall include an oxygen monitor for

correcting the data for excess air. In place of the SO<sub>2</sub> monitor, an instrument for continuously monitoring and recording the concentration (dry basis) of H<sub>2</sub>S in fuel gases before being burned in a fuel gas combustion device may be used.

- (i) The span value for this instrument is 0.186 grains/dry standard cubic feet (gr/dscf) H<sub>2</sub>S.
- (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 H<sub>2</sub>S in the fuel gas being burned.
- (iii) The performance evaluations for this H<sub>2</sub>S monitor under § 60.13(c) shall use Performance Specification 7. Method 11 shall be used for conducting the relative accuracy evaluations.

**PART II**  
**EMISSION LIMITATIONS AND MONITORING REQUIREMENTS**

Beginning June 12, 2001, the permittee is authorized to construct air emissions equipment for the emission of air contaminants from IsoMax I, Emission Point AA-026, a 40 MMBTUH Process Heater (Reference No. F-1306).

The air emissions equipment shall be constructed to comply with the emission limitations and monitoring requirements specified below.

**EMISSION LIMITATIONS\***

|                    |  |
|--------------------|--|
| Particulate Matter | 0.476 lbs per MMBtu heat input.  |
| Sulfur Dioxide     | 2.46 lbs/hr and 6.20 tons/year, as determined by EPA Test Method 6, 40 CFR 60, Appendix A. |
| Sulfuric Acid      | 0.04 lbs/hr and 0.10 tons/year, as determined by EPA Test Method 8, 40 CFR 60, Appendix A. |
| Opacity            | 40% as determined by EPA Test Method 9, 40 CFR 60, Appendix A.                             |

All test methods specified above shall be those versions, or their approved equivalents, which are in effect June 12, 2001.

\* The particulate matter emission limitation established in a previous Permit to Construct.

**FUEL RESTRICTIONS**

Fuels other than Natural Gas and Refinery Fuel Gas (RFG) are prohibited.

**MONITORING REQUIREMENTS**

The permittee shall record and maintain records of the amounts of each fuel combusted during each day.

The permittee shall collect weekly fuel samples in an as-fired condition and analyze for sulfur content.

The permittee shall install, calibrate, maintain, and operate an instrument for continuously monitoring and recording the concentration by volume (dry basis, zero percent excess air) of SO<sub>2</sub> emissions into the atmosphere. The monitor shall include an oxygen monitor for

correcting the data for excess air. In place of the SO<sub>2</sub> monitor, an instrument for continuously monitoring and recording the concentration (dry basis) of H<sub>2</sub>S in fuel gases before being burned in a fuel gas combustion device may be used.

- (i) The span value for this instrument is 0.186 grains/dry standard cubic feet (gr/dscf) H<sub>2</sub>S.
- (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 H<sub>2</sub>S in the fuel gas being burned.
- (iii) The performance evaluations for this H<sub>2</sub>S monitor under § 60.13(c) shall use Performance Specification 7. Method 11 shall be used for conducting the relative accuracy evaluations.

**PART II**  
**EMISSION LIMITATIONS AND MONITORING REQUIREMENTS**

Beginning June 12, 2001, the permittee is authorized to construct air emissions equipment for the emission of air contaminants from Naphtha Hydrotreater I, Emission Point AA-041, a 72 MMBTUH Process Heater (Reference No. F-1531).

The air emissions equipment shall be constructed to comply with the emission limitations and monitoring requirements specified below.

**EMISSION LIMITATIONS\***

|                    |   |
|--------------------|---|
| Particulate Matter | 0.432 lbs per MMBtu heat input.   |
| Sulfur Dioxide     | 4.43 lbs/hr and 11.16 tons/year, as determined by EPA Test Method 6, 40 CFR 60, Appendix A. |
| Sulfuric Acid      | 0.07 lbs/hr and 0.20 tons/year, as determined by EPA Test Method 8, 40 CFR 60, Appendix A.  |
| Opacity            | 40% as determined by EPA Test Method 9, 40 CFR 60, Appendix A.                              |

All test methods specified above shall be those versions, or their approved equivalents, which are in effect June 12, 2001.

\* The particulate matter emission limitation established in a previous Permit to Construct.

**FUEL RESTRICTIONS**

Fuels other than Natural Gas and Refinery Fuel Gas (RFG) are prohibited.

**MONITORING REQUIREMENTS**

The permittee shall record and maintain records of the amounts of each fuel combusted during each day.

The permittee shall collect weekly fuel samples in an as-fired condition and analyze for sulfur content.

The permittee shall install, calibrate, maintain, and operate an instrument for continuously monitoring and recording the concentration by volume (dry basis, zero percent excess air) of SO<sub>2</sub> emissions into the atmosphere. The monitor shall include an oxygen monitor for correcting the data for excess air.

In place of the SO<sub>2</sub> monitor, an instrument for continuously monitoring and recording the

concentration (dry basis) of H<sub>2</sub>S in fuel gases before being burned in a fuel gas combustion device may be used.

- (i) The span value for this instrument is 0.186 grains/dry standard cubic feet (gr/dscf) H<sub>2</sub>S.
- (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 H<sub>2</sub>S in the fuel gas being burned.
- (iii) The performance evaluations for this H<sub>2</sub>S monitor under § 60.13(c) shall use Performance Specification 7. Method 11 shall be used for conducting the relative accuracy evaluations.

**PART II**  
**EMISSION LIMITATIONS AND MONITORING REQUIREMENTS**

Beginning June 12, 2001, the permittee is authorized to construct air emissions equipment for the emission of air contaminants from Rheniformer I, Emission Point AA-042, a 42 MMBTUH Process Heater (Reference No. F-1532).

The air emissions equipment shall be constructed to comply with the emission limitations and monitoring requirements specified below.

**EMISSION LIMITATIONS\***

|                    |  |
|--------------------|--|
| Particulate Matter | 0.472 lbs per MMBtu heat input.  |
| Sulfur Dioxide     | 2.58 lbs/hr and 6.51 tons/year, as determined by EPA Test Method 6, 40 CFR 60, Appendix A. |
| Sulfuric Acid      | 0.04 lbs/hr and 0.10 tons/year, as determined by EPA Test Method 8, 40 CFR 60, Appendix A. |
| Opacity            | 40% as determined by EPA Test Method 9, 40 CFR 60, Appendix A.                             |

All test methods specified above shall be those versions, or their approved equivalents, which are in effect June 12, 2001.

\* The particulate matter emission limitation established in a previous Permit to Construct.

**FUEL RESTRICTIONS**

Fuels other than Natural Gas and Refinery Fuel Gas (RFG) are prohibited.

**MONITORING REQUIREMENTS**

The permittee shall record and maintain records of the amounts of each fuel combusted during each day.

The permittee shall collect weekly fuel samples in an as-fired condition and analyze for sulfur content.

The permittee shall install, calibrate, maintain, and operate an instrument for continuously monitoring and recording the concentration by volume (dry basis, zero percent excess air) of SO<sub>2</sub> emissions into the atmosphere. The monitor shall include an oxygen monitor for correcting the data for excess air. In place of the SO<sub>2</sub> monitor, an instrument for

continuously monitoring and recording the concentration (dry basis) of H<sub>2</sub>S in fuel gases before being burned in a fuel gas combustion device may be used.

- (i) The span value for this instrument is 0.186 grains/dry standard cubic feet (gr/dscf) H<sub>2</sub>S.
- (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 H<sub>2</sub>S in the fuel gas being burned.
- (iii) The performance evaluations for this H<sub>2</sub>S monitor under § 60.13(c) shall use Performance Specification 7. Method 11 shall be used for conducting the relative accuracy evaluations.

**PART II**  
**EMISSION LIMITATIONS AND MONITORING REQUIREMENTS**

Beginning January 6, 2003, the permittee is authorized to construct air emissions equipment for the emission of air contaminants from Rheniformer I, Emission Point AA-043, three (3) Process Furnaces. Total combined heat input capacity, 545 MMBTUH (Reference No. F-1501, 1502 & 1503, respectively). Fuel combustion emissions generated are vented through a single exhaust stack.

The air emissions equipment shall be constructed to comply with the emission limitations and monitoring requirements specified below.

**EMISSION LIMITATIONS\***

|                    |   |
|--------------------|---|
| Particulate Matter | 5.45 lbs/hr and 21.6 tons/year, as determined by EPA Test Methods 1-5, 40 CFR 60, Appendix A.   |
| PM <sub>10</sub>   | 5.45 lbs/hr and 21.6 tons/year as determined by EPA Test Method 201 or 201A in conjunction with Test Method 202, 40 CFR 51, Appendix M. |
| Sulfur Dioxide     | 33.50 lbs/hr and 84.55 tons/year, as determined by EPA Test Method 6, 40 CFR 60, Appendix A.  |
| Nitrogen Oxides    | 136.0 lbs/hr not to exceed 539.7 tons/year, as determined by EPA Test Method 7, 40 CFR 60, Appendix A.                                  |
| Carbon Monoxide    | 118 lbs/hr not to exceed 169.0 tons/year, as determined by EPA Test Method 10, 40 CFR 60, Appendix A.                                   |
| Sulfuric Acid      | 0.52 lbs/hr and 1.31 tons/year, as determined by EPA Test Method 8, 40 CFR 60, Appendix.  |
| Opacity            | 40% as determined by EPA Test Method 9, 40 CFR 60, Appendix A.  |

All test methods specified above shall be those versions, or their approved equivalents, which are in effect January 6, 2003.

- \* The particulate matter, nitrogen oxide and carbon monoxide emission limitations were established in a Permit to Construct issued October 24, 1997.
- \* The emission limitations are representative of the total combined emission for the three (3) process furnaces.

**FUEL RESTRICTIONS**

Fuels other than Natural Gas and Refinery Fuel Gas (RFG) are prohibited.

### **TEST METHODS AND PROCEDURES**

Within 60 days after achieving the maximum production rate at which Emission Point AA-043 will be operated, but no later than 180 days of any physical (or operational) change to the Rheniformer I, process furnaces (see Part III, Notification Requirements, item 11), the permittee shall demonstrate compliance with the sulfur dioxide (SO<sub>2</sub>) and sulfuric acid emission limitation by stack testing as specified below and biennially thereafter.

- (1) Sulfur Dioxide utilizing EPA Reference Method 6
- (2) Sulfuric Acid utilizing EPA Reference Method 8

For the purpose of demonstrating compliance, the permittee shall operate the emission unit at its maximum capacity. The three (3) process furnaces must be tested simultaneously.

A pretest conference at least thirty (30) days prior to the scheduled test date is needed to ensure that all test methods and procedures are acceptable to the Office of Pollution Control. Also, the Office of Pollution Control must be notified prior to the scheduled test date. At least ten (10) days notice shall be given so that an observer may be scheduled to witness the test(s).

### **MONITORING REQUIREMENTS**

The permittee shall record and maintain records of the amounts of each fuel combusted during each day.

The permittee shall collect weekly fuel samples in an as-fired condition and analyze for sulfur content.

The permittee shall install, calibrate, maintain, and operate an instrument for continuously monitoring and recording the concentration by volume (dry basis, zero percent excess air) of SO<sub>2</sub> emissions into the atmosphere. The monitor shall include an oxygen monitor for correcting the data for excess air.

In place of the SO<sub>2</sub> monitor, an instrument for continuously monitoring and recording the concentration (dry basis) of H<sub>2</sub>S in fuel gases before being burned in a fuel gas combustion device may be used.

- (i) The span value for this instrument is 0.186 grains/dry standard cubic feet (gr/dscf) H<sub>2</sub>S.
- (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 H<sub>2</sub>S in the fuel gas being burned.

- (iii) The performance evaluations for this H<sub>2</sub>S monitor under § 60.13(c) shall use Performance Specification 7. Method 11 shall be used for conducting the relative accuracy evaluations.

**PART II**  
**EMISSION LIMITATIONS AND MONITORING REQUIREMENTS**

Beginning January 6, 2003 and lasting until receipt of certification of construction for Emission Point AA-051 in accordance with the "FCC/Alky Project" Construction Permit, the permittee is authorized to construct air emissions equipment for the emission of air contaminants from Emission Point AA-051, the Fluidized-bed Catalytic Cracking (FCC) Unit, Catalyst Regenerator (Reference No. F-1603). The FCC unit is equipped with an electrostatic precipitator to control particulate matter emissions.

Emission Point AA-051 includes air emissions from fuel combustion and flue gases from catalyst regeneration.

The air emissions equipment shall be constructed to comply with the emission limitations and monitoring requirements specified below.

**EMISSION LIMITATIONS\***

|                    |   |
|--------------------|---|
| Particulate Matter | 222.5 lbs/hr and 200 tons/year, as determined by EPA Test Methods 1-5B or 5F, 40 CFR 60, Appendix A.                                    |
| PM <sub>10</sub>   | 222.5 lbs/hr and 200 tons/year as determined by EPA Test Method 201 or 201A in conjunction with Test Method 202, 40 CFR 51, Appendix M. |
| Sulfur Dioxide     | 1,000 lbs/hr and 1,600 tons/year, as determined by EPA Test Method 6C, 40 CFR 60, Appendix A.   |
| Nitrogen Oxides    | 375 lbs/hr and 434.8 tons/year, as determined by EPA Test Method 7, 40 CFR 60, Appendix A.  |
| Carbon Monoxide    | 588 lbs/hr and 710 tons/year, as determined by EPA Test Method 10, 40 CFR 60, Appendix A.   |
| Sulfuric Acid      | 47.36 lbs/hr and 76.02 tons/year, as determined by EPA Test Method 8, 40 CFR 60, Appendix.  |
| Ammonia            | 21.0 lbs/hr not to exceed 92.0 tons/year.   |
| Hydrogen Cyanide   | 4.0 lbs/hr not to exceed 17.5 tons/year.  |
| Opacity            | 40% as determined by EPA Test Method 9, 40 CFR 60, Appendix A.  |

All test methods specified above shall be those versions, or their approved equivalents,

which are in effect January 6, 2003.

- \* The nitrogen oxide and carbon monoxide emission limitation were established in a Permit to Construct issued November 24, 1999, and the ammonia and hydrogen cyanide emission limitations were established in a Permit to Construct issued December 17, 1996.

### **TEST METHODS AND PROCEDURES**

Within 60 days after achieving the maximum production rate at which Emission Point AA-051 will be operated, but no later than 180 days of any physical (or operational) change to the FCC unit, catalyst regenerator (see Part III, Notification Requirements, item 11), the permittee shall demonstrate compliance with Particulate Matter (PM/PM10), Sulfur Dioxide (SO<sub>2</sub>) and Sulfuric Acid emission limitation by stack testing in accordance with the following:

- (1) Particulate Matter utilizing EPA Reference Methods 1 - 5
- (2) Sulfur Dioxide utilizing EPA Reference Method 6C
- (3) Sulfuric Acid utilizing EPA Reference Method 8

For the purpose of demonstrating compliance, the permittee shall operate the emission unit at its maximum capacity.

A pretest conference at least thirty (30) days prior to the scheduled test date is needed to ensure that all test methods and procedures are acceptable to the Office of Pollution Control. Also, the Office of Pollution Control must be notified prior to the scheduled test date. At least ten (10) days notice shall be given so that an observer may be scheduled to witness the test(s).

### **MONITORING REQUIREMENTS**

The permittee shall collect weekly fresh feed and torch oil samples, in an as-fired condition, and analyze for sulfur content.

The permittee shall develop and submit for approval a monitoring plan which shall become an effective portion of this permit.

### **RECORDKEEPING AND REPORTING REQUIREMENTS**

The permittee shall record and maintain the following information:

- (a) The amount of torch oil combusted during each day, the maximum amount per hour (Mscf/hr) and the amount per year (MMscf/year) determined on a 12-month rolling average basis with a new yearly amount calculated at the end of the calendar month.
- (b) The fresh feed and torch oil sulfur content
- (c) The 24-hour average hourly SO<sub>2</sub> emission rate in pounds/hour and the 12-month rolling SO<sub>2</sub> emission total in tons/year.
- (d) Each operating day the sulfur dioxide emission rates are in excess of the SO<sub>2</sub> emission rate established in the permit, the magnitude of the excess emissions, the reason for excess emissions and a description of the corrective action or preventive measures taken. The permittee shall report within two (2) working days of any deviations from permit requirements, including those attributable to upsets, and the report shall include the cause of such deviations, and any corrective actions or preventive measures taken. Corrective actions may include a requirement for additional stack testing, or more frequent monitoring, or could trigger implementation of a corrective action plan.
- (e) Any compliance test reports or if applicable, quality assurance checks for any continuous monitoring system.
- (f) Calculations, data and a description of the method(s) used to determine the sulfur dioxide data and the sulfur dioxide emission rates.
- (g) A copy of the facility's Monitoring Plan.

The permittee shall maintain on site all records, data and calculations required by this section for a period of five (5) years following the date of such record and shall be made available for review upon request from (MDEQ) personnel.

The permittee shall submit semiannual reports providing the following information:

- (a) The total quantity of fuel (e.g., torch oil) combusted during each semiannual reporting period,
- (b) The average sulfur content of the fresh feed
- (c) The calculated average hourly SO<sub>2</sub> emission rate (in pounds/hour) and the 12-month rolling SO<sub>2</sub> emission total in tons/year,

- (d) Calculations, data and a description of the method(s) used to determine the sulfur dioxide data and the sulfur dioxide emission rate, and
- (e) Each operating day the sulfur dioxide emission rates are in excess of the SO<sub>2</sub> emission rate established in the permit, the magnitude of the excess emissions, the reason for excess emissions and a description of the corrective action or preventive measures taken.

The report shall be post marked no later than thirty (30) following the end of each calendar half.

**PART II**  
**EMISSION LIMITATIONS AND MONITORING REQUIREMENTS**

Beginning October 11, 2005, and lasting until receipt of certification of construction for Emission Point AA-051 in accordance with the "FCC/Alky Project" Construction Permit, the permittee is authorized to construct air emissions equipment for the emission of air contaminants from Emission Point AA-052, the Fluidized-bed Catalytic Cracking (FCC) Unit, 165 MMBTUH Process Heater equipped with Ultra-Low-NO<sub>x</sub> Burners to reduce nitrogen oxide emissions (Reference No. F-1601).

The air emissions equipment shall be constructed to comply with the emission limitations and monitoring requirements specified below.

**EMISSION LIMITATIONS**

|                    |  |
|--------------------|--|
| Particulate Matter | 1.84 lbs/hr and 5.38 tons/year, as determined by EPA Test Methods 1-5, 40 CFR 60, Appendix A.  |
| PM <sub>10</sub>   | 1.84 lbs/hr and 5.38 tons/year as determined by EPA Test Method 201 or 201A in conjunction with Test Method 202, 40 CFR 51, Appendix M.                  |
| Sulfur Dioxide     | 10.14 lbs/hr and 25.60 tons/year, as determined by EPA Test Method 6, 40 CFR 60, Appendix A.   |
| Nitrogen Oxides    | 9.16 lbs/hr and 20.02 tons/year, as determined by EPA Test Method 7, 40 CFR 60, Appendix A.  |
| Carbon Monoxide    | 44.67 lbs/hr and 48.60 tons/year, as determined by EPA Test Method 10, 40 CFR 60, Appendix A.  |
| Sulfuric Acid      | 0.16 lbs/hr and 0.40 tons/year, as determined by EPA Test Method 8, 40 CFR 60, Appendix A.   |
| Opacity            | 20% (6-minute average), except for one 6-minute period per hour of not more than 27% opacity, as determined by EPA Test Method 9, 40 CFR 60, Appendix A. |

All test methods specified above shall be those versions, or their approved equivalents, which are in effect October 11, 2005.

### **FUEL RESTRICTIONS**

Fuels other than Natural Gas and Refinery Fuel Gas (RFG) are prohibited.

### **TEST METHODS AND PROCEDURES**

Within 60 days after achieving the maximum production rate at which Emission Point AA-051 will be operated, but no later than 180 days of any physical (or operational) change to the FCC unit, catalyst regenerator (see Part III, Notification Requirements, item 11), the permittee shall demonstrate compliance with Particulate Matter (PM/PM10), Sulfur Dioxide (SO<sub>2</sub>) and Sulfuric Acid emission limitation by stack testing in accordance with the following:

- (1) Particulate Matter utilizing EPA Reference Methods 1 - 5
- (2) Sulfur Dioxide utilizing EPA Reference Method 6C
- (3) Sulfuric Acid utilizing EPA Reference Method 8

For the purpose of demonstrating compliance, the permittee shall operate the emission unit at its maximum capacity.

A pretest conference at least thirty (30) days prior to the scheduled test date is needed to ensure that all test methods and procedures are acceptable to the Office of Pollution Control. Also, the Office of Pollution Control must be notified prior to the scheduled test date. At least ten (10) days notice shall be given so that an observer may be scheduled to witness the test(s).

### **MONITORING REQUIREMENTS**

The permittee shall record and maintain records of the amounts of each fuel combusted during each day.

The permittee shall collect weekly fuel samples in an as-fired condition and analyze for sulfur content.

The permittee shall install, calibrate, maintain, and operate an instrument for continuously monitoring and recording the concentration by volume (dry basis, zero percent excess air) of SO<sub>2</sub> emissions into the atmosphere. The monitor shall include an oxygen monitor for correcting the data for excess air.

In place of the SO<sub>2</sub> monitor, an instrument for continuously monitoring and recording the concentration (dry basis) of H<sub>2</sub>S in fuel gases before being burned in a fuel gas combustion

device may be used.

- (i) The span value for this instrument is 0.186 grains/dry standard cubic feet (gr/dscf) H<sub>2</sub>S.
- (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 H<sub>2</sub>S in the fuel gas being burned.
- (iii) The performance evaluations for this H<sub>2</sub>S monitor under § 60.13(c) shall use Performance Specification 7. Method 11 shall be used for conducting the relative accuracy evaluations.

The permittee shall conduct a visible emissions test of Emission AA-052 with EPA Reference Test Method 22 of 40 CFR 60, Appendix A, on a daily basis and whenever there is a public complaint of visible emissions. Testing shall be conducted during daylight hours and during conditions representative of normal operation. Observations shall be recorded for at least three (3) 6-minute periods each day. If any visible emissions (not including condensed water vapor) are observed, the permittee shall report the visible emissions as a potential deviation and the permittee shall:

- (a) Within one (1) hour, initiate corrective actions to eliminate the visible emissions. Verify that the air emissions equipment and/or any associated pollution control equipment is operating normally, in accordance with design and standard procedures, and under the same conditions in which compliance was achieved in the past.
- (b) Within 24 hours of the end of the Method 22 test in which visible emissions were observed and at least once per day until there is no indication of visible emissions, a certified visual emissions observer shall conduct an opacity test of each stack from which visible emissions were observed in accordance with EPA Reference Test Method 9, 40 CFR 60, Appendix A. The duration of the method 9 test shall be thirty (30) minutes.

### **RECORDKEEPING AND REPORTING REQUIREMENTS**

The permittee shall maintain sufficient records documenting:

- (a) Identification of stack and/or Emission Point;
- (b) Results of all required visual observations. To include Method 9 testing results when

applicable;

- (c) Description of corrective actions taken and a statement of verification, the emission unit and, if applicable, associated pollution control device are operating in accordance with design and standard procedures. Otherwise, operating normally;
- (d) Date and time any visible emissions were abated.

The permittee shall maintain on site all records and data used to determine visible emissions for a period of five (5) years following the date of such record and be made available for review upon request from Mississippi Department of Environmental Quality (MDEQ) personnel.

The permittee shall submit semiannual reports providing an identification of the stack and/or emission point; results of all required visual observations/tests, the nature and cause of any visible emissions, the corrective action taken or preventive measures adopted; and date and time visible emissions were observed and abated.

The report shall be postmarked no later than 30 days following the end of each calendar half.

**PART II**  
**EMISSION LIMITATIONS AND MONITORING REQUIREMENTS**

Beginning June 12, 2001, the permittee is authorized to construct air emissions equipment for the emission of air contaminants from the Boiler Plant, Emission Point AA-101, the 257 MMBTUH Steam Boiler (Reference No. F-2101).

The air emissions equipment shall be constructed to comply with the emission limitations and monitoring requirements specified below.

**EMISSION LIMITATIONS\***

|                    |  |
|--------------------|--|
| Particulate Matter | 0.349 lbs per MMBTU heat input.  |
| Sulfur Dioxide     | 15.80 lbs/hr and 39.85 tons/year, as determined by EPA Test Method 6, 40 CFR 60, Appendix A. |
| Sulfuric Acid      | 0.24 lbs/hr and 0.62 tons/year, as determined by EPA Test Method 8, 40 CFR 60, Appendix A.   |
| Opacity            | 40% as determined by EPA Test Method 9, 40 CFR 60, Appendix A.                               |

All test methods specified above shall be those versions, or their approved equivalents, which are in effect June 12, 2001.

\* The particulate matter emission limitation established in a previous Permit to Construct.

**FUEL RESTRICTIONS**

Fuels other than Natural Gas and Refinery Fuel Gas (RFG) are prohibited.

**MONITORING REQUIREMENTS**

The permittee shall record and maintain records of the amounts of each fuel combusted during each day.

The permittee shall collect weekly fuel samples in an as-fired condition and analyze for sulfur content.

The permittee shall install, calibrate, maintain, and operate an instrument for continuously monitoring and recording the concentration by volume (dry basis, zero percent excess air) of SO<sub>2</sub> emissions into the atmosphere. The monitor shall include an oxygen monitor for

correcting the data for excess air.

In place of the SO<sub>2</sub> monitor, an instrument for continuously monitoring and recording the concentration (dry basis) of H<sub>2</sub>S in fuel gases before being burned in a fuel gas combustion device.

- (i) The span value for this instrument is 0.186 grains/dry standard cubic feet (gr/dscf) H<sub>2</sub>S.
- (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 H<sub>2</sub>S in the fuel gas being burned.
- (iii) The performance evaluations for this H<sub>2</sub>S monitor under § 60.13(c) shall use Performance Specification 7. Method 11 shall be used for conducting the relative accuracy evaluations.

**PART II**  
**EMISSION LIMITATIONS AND MONITORING REQUIREMENTS**

Beginning June 12, 2001, the permittee is authorized to construct air emissions equipment for the emission of air contaminants from the Boiler Plant, Emission Point AA-102, the 257 MMBTUH Steam Boiler (Reference No. F-2102).

The air emissions equipment shall be constructed to comply with the emission limitations and monitoring requirements specified below.

**EMISSION LIMITATIONS\***

|                    |  |
|--------------------|--|
| Particulate Matter | 0.349 lbs per MMBtu heat input.  |
| Sulfur Dioxide     | 15.80 lbs/hr and 39.85 tons/year, as determined by EPA Test Method 6, 40 CFR 60, Appendix A. |
| Sulfuric Acid      | 0.24 lbs/hr and 0.62 tons/year, as determined by EPA Test Method 8, 40 CFR 60, Appendix A.   |
| Opacity            | 40% as determined by EPA Test Method 9, 40 CFR 60, Appendix A.                               |

All test methods specified above shall be those versions, or their approved equivalents, which are in effect June 12, 2001.

\* The particulate matter emission limitation established in a previous Permit to Construct.

**FUEL RESTRICTIONS**

Fuels other than Natural Gas and Refinery Fuel Gas (RFG) are prohibited.

**MONITORING REQUIREMENTS**

The permittee shall record and maintain records of the amounts of each fuel combusted during each day.

The permittee shall collect weekly fuel samples in an as-fired condition and analyze for sulfur content.

The permittee shall install, calibrate, maintain, and operate an instrument for continuously monitoring and recording the concentration by volume (dry basis, zero percent excess air) of SO<sub>2</sub> emissions into the atmosphere. The monitor shall include an oxygen monitor for correcting the data for excess air.

In place of the SO<sub>2</sub> monitor, an instrument for continuously monitoring and recording the concentration (dry basis) of H<sub>2</sub>S in fuel gases before being burned in a fuel gas combustion device may be used.

- (i) The span value for this instrument is 0.186 grains/dry standard cubic feet (gr/dscf) H<sub>2</sub>S.
- (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 H<sub>2</sub>S in the fuel gas being burned.
- (iii) The performance evaluations for this H<sub>2</sub>S monitor under § 60.13(c) shall use Performance Specification 7. Method 11 shall be used for conducting the relative accuracy evaluations.

**PART II**  
**EMISSION LIMITATIONS AND MONITORING REQUIREMENTS**

Beginning June 12, 2001, the permittee is authorized to construct air emissions equipment for the emission of air contaminants from the Boiler Plant, Emission Point AA-103, the 257 MMBTUH Steam Boiler (Reference No. F-2103).

The air emissions equipment shall be constructed to comply with the emission limitations and monitoring requirements specified below.

**EMISSION LIMITATIONS** \*

|                    |  |
|--------------------|--|
| Particulate Matter | 0.349 lbs per MMBtu heat input.  |
| Sulfur Dioxide     | 15.80 lbs/hr and 39.85 tons/year, as determined by EPA Test Method 6, 40 CFR 60, Appendix A. |
| Sulfuric Acid      | 0.24 lbs/hr and 0.62 tons/year, as determined by EPA Test Method 8, 40 CFR 60, Appendix A.   |
| Opacity            | 40% as determined by EPA Test Method 9, 40 CFR 60, Appendix A.                               |

All test methods specified above shall be those versions, or their approved equivalents, which are in effect June 12, 2001.

\* The particulate matter emission limitation established in a previous Permit to Construct.

**FUEL RESTRICTIONS**

Fuels other than Natural Gas and Refinery Fuel Gas (RFG) are prohibited.

**MONITORING REQUIREMENTS**

The permittee shall record and maintain records of the amounts of each fuel combusted during each day.

The permittee shall collect weekly fuel samples in an as-fired condition and analyze for sulfur content.

The permittee shall install, calibrate, maintain, and operate an instrument for continuously monitoring and recording the concentration by volume (dry basis, zero percent excess air) of SO<sub>2</sub> emissions into the atmosphere. The monitor shall include an oxygen monitor for correcting the data for excess air.

In place of the SO<sub>2</sub> monitor, an instrument for continuously monitoring and recording the concentration (dry basis) of H<sub>2</sub>S in fuel gases before being burned in a fuel gas combustion device may be used.

- (i) The span value for this instrument is 0.186 grains/dry standard cubic feet (gr/dscf) H<sub>2</sub>S.
- (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 H<sub>2</sub>S in the fuel gas being burned.
- (iii) The performance evaluations for this H<sub>2</sub>S monitor under § 60.13(c) shall use Performance Specification 7. Method 11 shall be used for conducting the relative accuracy evaluations.

**PART II**  
**EMISSION LIMITATIONS AND MONITORING REQUIREMENTS**

Beginning January 6, 2003, the permittee is authorized to construct air emissions equipment for the emission of air contaminants from the Heavy Saleable Gas-Oil (HSGO) Hydrofiner, Emission Point AA-111, the 48 MMBTUH Process Heater (Reference No. F-2201).

The air emissions equipment shall be constructed to comply with the emission limitations and monitoring requirements specified below.

**EMISSION LIMITATIONS \***

|                    |  |
|--------------------|--|
| Particulate Matter | 0.478 lbs per MMBtu heat input.  |
| PM <sub>10</sub>   | 0.436 lbs/hr and 1.27 tons/year as determined by EPA Test Method 201 or 201A in conjunction with Test Method 202, 40 CFR 51, Appendix M. |
| Sulfur Dioxide     | 2.95 lbs/hr and 7.45 tons/year, as determined by EPA Test Method 6, 40 CFR 60, Appendix A.   |
| Sulfuric Acid      | 0.05 lbs/hr and 0.12 tons/year, as determined by EPA Test Method 8, 40 CFR 60, Appendix A.   |
| Opacity            | 40% as determined by EPA Test Method 9, 40 CFR 60, Appendix A.   |

All test methods specified above shall be those versions, or their approved equivalents, which are in effect January 6, 2003.

\* The particulate matter emission limitation established in a previous Permit to Construct.

**FUEL RESTRICTIONS**

Fuels other than Natural Gas and Refinery Fuel Gas (RFG) are prohibited.

**TEST METHODS AND PROCEDURES**

Within 60 days after achieving the maximum production rate at which Emission Point AA-111 will be operated, but no later than 180 days of any physical (or operational) change to the HSGO Hydrofiner, process heater (see Part III, Notification Requirements, item 11), the permittee shall demonstrate compliance with the sulfur dioxide (SO<sub>2</sub>) and sulfuric acid emission limitation by stack testing as specified below and biennially thereafter.

- (1) Sulfur Dioxide utilizing EPA Reference Method 6
- (2) Sulfuric Acid utilizing EPA Reference Method 8

For the purpose of demonstrating compliance, the permittee shall operate the emission unit at its maximum capacity.

A pretest conference at least thirty (30) days prior to the scheduled test date is needed to ensure that all test methods and procedures are acceptable to the Office of Pollution Control. Also, the Office of Pollution Control must be notified prior to the scheduled test date. At least ten (10) days notice shall be given so that an observer may be scheduled to witness the test(s).

### **MONITORING REQUIREMENTS**

The permittee shall record and maintain records of the amounts of each fuel combusted during each day.

The permittee shall collect weekly fuel samples in an as-fired condition and analyze for sulfur content.

The permittee shall install, calibrate, maintain, and operate an instrument for continuously monitoring and recording the concentration by volume (dry basis, zero percent excess air) of SO<sub>2</sub> emissions into the atmosphere. The monitor shall include an oxygen monitor for correcting the data for excess air.

In place of the SO<sub>2</sub> monitor, an instrument for continuously monitoring and recording the concentration (dry basis) of H<sub>2</sub>S in fuel gases before being burned in a fuel gas combustion device.

- (i) The span value for this instrument is 0.186 grains/dry standard cubic feet (gr/dscf) H<sub>2</sub>S.
- (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 H<sub>2</sub>S in the fuel gas being burned.
- (iii) The performance evaluations for this H<sub>2</sub>S monitor under § 60.13(c) shall use Performance Specification 7. Method 11 shall be used for conducting the relative accuracy evaluations.

**PART II**  
**EMISSION LIMITATIONS AND MONITORING REQUIREMENTS**

Beginning January 6, 2003, the permittee is authorized to construct air emissions equipment for the emission of air contaminants from Emission Point AA-150, the Storage Tanks listed below:

| <b>Tank Reference No.</b> | <b>Plant</b>    | <b>Tank Capacity (gallons)</b> | <b>Tank Type</b>              |
|---------------------------|-----------------|--------------------------------|-------------------------------|
| T-400                     | <b>Blending</b> | 11,216,478                     | <b>External Floating Roof</b> |
| T-401                     |                 | 11,243,778                     |                               |
| T-402                     |                 | 11,236,302                     |                               |
| T-403                     |                 | 11,207,154                     |                               |
| T-404                     |                 | 11,252,892                     |                               |
| T-405                     |                 | 11,162,928                     |                               |
| T-208                     | <b>Shipping</b> | 16,074,744                     | <b>External Floating Roof</b> |
| T-406                     |                 | 16,417,296                     |                               |
| T-407                     |                 | 16,246,608                     |                               |
| T-408                     |                 | 16,124,682                     |                               |
| T-409                     |                 | 16,394,070                     |                               |
| T-412                     |                 | 16,257,906                     |                               |
| T-422                     |                 | 16,258,032                     |                               |
| T-301                     | <b>Blending</b> | 3,333,078                      | <b>External Floating Roof</b> |
| T-311                     |                 | 4,525,794                      |                               |
| T-316                     |                 | 693,714                        |                               |
| T-323                     |                 | 6,680,772                      |                               |

| Tank Reference No | Plant     | Tank Capacity (gallons) | Tank Type              |
|-------------------|-----------|-------------------------|------------------------|
| T-331             | Blending  | 4,451,160               | External Floating Roof |
| T-333             |           | 6,800,766               |                        |
| T-324             | Blending  | 11,122,776              | External Floating Roof |
| T-360             |           | 4,424,700               | Fixed Roof             |
| T-361             |           | 4,410,042               |                        |
| T-370             |           | 2,683,296               |                        |
| T-371             |           | 2,679,054               |                        |
| T-372             |           | 1,322,412               |                        |
| T-100             |           | Blending                |                        |
| T-110             | 4,417,056 |                         |                        |
| T-206             | Shipping  | 8,420,580               |                        |
| T-152             | Blending  | 3,403,092               | External Floating Roof |
| T-160             |           | 4,533,186               |                        |
| T-170             |           | 4,533,690               |                        |
| T-194             |           | 6,678,504               |                        |

Such air emissions equipment shall be constructed in accordance with design criteria in the application, plans, and other technical documents submitted with the application to construct.

**PART II**  
**EMISSION LIMITATIONS AND MONITORING REQUIREMENTS**

Beginning January 6, 2003, the permittee is authorized to construct air emissions equipment for the emission of air contaminants from Reformate Distillation Unit, Emission Point AA-161, the 80.4 MMBTUH Rerun Column Reboiler Furnace equipped with Ultra-Low-NO<sub>x</sub> burners (Reference No. F-5327A).

Fuel combustion emissions generated from Emission Point AA-161 and Emission Point AA-162 are vented through a common exhaust stack (Reference No. F-5327A/B).

The air emissions equipment shall be constructed to comply with the emission limitations and monitoring requirements specified below.

**EMISSION LIMITATIONS\***

|                            |   |
|----------------------------|---|
| Particulate Matter         | 0.02 lbs/MMBtu heat input not to exceed 7.05 tons/year, as determined by EPA Test Methods 1-5, 40 CFR 60, Appendix A.   |
| PM <sub>10</sub>           | 0.02 lbs/MMBtu heat input not to exceed 7.05 tons/year as determined by EPA Test Method 201 or 201A in conjunction with Test Method 202, 40 CFR 51, Appendix M. |
| Sulfur Dioxide             | 4.94 lbs/hr and 12.47 tons/year, as determined by EPA Test Method 6, 40 CFR 60, Appendix A.   |
| Nitrogen Oxides            | 0.037 lbs/MMBtu heat input not to exceed 13.03 tons/year, as determined by EPA Test Method 7, 40 CFR 60, Appendix A.  |
| Carbon Monoxide            | 0.04 lbs/MMBtu heat input not to exceed 14.1 tons/year, as determined by EPA Method 10, 40 CFR 60, Appendix A   |
| Volatile Organic Compounds | 0.015 lb/MMBtu heat input not to exceed 5.3 tons/year, as determined by EPA Method 25, 40 CFR 60, Appendix A  |
| Sulfuric Acid              | 0.08 lbs/hr and 0.19 tons/year, as determined by EPA Test Method 8, 40 CFR 60, Appendix A.  |
| Opacity                    | 40% as determined by EPA Test Method 9, 40 CFR 60, Appendix A.  |

All test methods specified above shall be those versions, or their approved equivalents, which are in effect January 6, 2003.

- \* The particulate matter, nitrogen oxides, carbon monoxide and volatile organic compounds emission limitations established in a previous Prevention of Significant Deterioration (PSD) Permit to Construct issued September 24, 1996.

### **FUEL RESTRICTIONS**

Fuels other than Natural Gas, Refinery Fuel Gas (RFG) and Ethylbenzene (EB) Fuel Gas are prohibited.

### **STANDARD FOR SULFUR DIOXIDE**

The permittee shall not combust any fuel gas that contains Hydrogen Sulfide (H<sub>2</sub>S) in excess of 0.10 grains/dry standard cubic feet (gr/dscf).

### **TEST METHODS AND PROCEDURES**

Within 60 days after achieving the maximum production rate at which Emission Point AA-161 will be operated, but no later than 180 days of any physical (or operational) change to the rerun column reboiler furnace (see Part III, Notification Requirements, item 11), the permittee shall demonstrate compliance with the sulfur dioxide (SO<sub>2</sub>) and sulfuric acid emission limitation by stack testing as specified below:

- (1) Sulfur Dioxide utilizing EPA Reference Method 6
- (2) Sulfuric Acid utilizing EPA Reference Method 8

For the purpose of demonstrating compliance, the permittee shall operate the emission unit at its maximum capacity.

A pretest conference at least thirty (30) days prior to the scheduled test date is needed to ensure that all test methods and procedures are acceptable to the Office of Pollution Control. Also, the Office of Pollution Control must be notified prior to the scheduled test date. At least ten (10) days notice shall be given so that an observer may be scheduled to witness the test(s).

### **MONITORING REQUIREMENTS**

The permittee shall record and maintain records of the amounts of each fuel combusted during each day.

The permittee shall collect weekly fuel samples in an as-fired condition and analyze for

sulfur content.

The permittee shall install, calibrate, maintain, and operate an instrument for continuously monitoring and recording the concentration by volume (dry basis, zero percent excess air) of SO<sub>2</sub> emissions into the atmosphere. The monitor shall include an oxygen monitor for correcting the data for excess air.

In place of the SO<sub>2</sub> monitor, an instrument for continuously monitoring and recording the concentration (dry basis) of H<sub>2</sub>S in fuel gases before being burned in a fuel gas combustion device may be used.

- (i) The span value for this instrument is 0.186 grains/dry standard cubic feet (gr/dscf) H<sub>2</sub>S.
- (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 H<sub>2</sub>S in the fuel gas being burned.
- (iii) The performance evaluations for this H<sub>2</sub>S monitor under § 60.13(c) shall use Performance Specification 7. Method 11 shall be used for conducting the relative accuracy evaluations.

**PART II**  
**EMISSION LIMITATIONS AND MONITORING REQUIREMENTS**

Beginning January 6, 2003, the permittee is authorized to construct air emissions equipment for the emission of air contaminants from the Reformate Distillation Unit, Emission Point AA-162, the 80.4 MMBTUH Rerun Column Reboiler Furnace equipped with Ultra-Low-NOX burners to reduce Nitrogen Oxide emissions (Reference No. F-5327B).

Fuel combustion emissions generated from Emission Point AA-162 and Emission Point AA-161 are vented through a common exhaust stack (Reference No. F-5327A/B).

The air emissions equipment shall be constructed to comply with the emission limitations and monitoring requirements specified below.

**EMISSION LIMITATIONS \***

|                            |  |
|----------------------------|--|
| Particulate Matter         | 0.02 lbs/MMBtu heat input not to exceed 7.05 tons/year, as determined by EPA Test Methods 1-5, 40 CFR 60 Appendix A.   |
| PM <sub>10</sub>           | 0.02 lbs/MMBtu heat input not to exceed 7.05 tons/year, as determined by EPA Test Method 201 or 201A in conjunction with Test Method 202, 40 CFR 51, Appendix M. |
| Sulfur Dioxide             | 4.94 lbs/hr and 12.47 tons/year, as determined by EPA Test Method 6, 40 CFR 60, Appendix A.  |
| Nitrogen Oxides            | 0.037 lbs/MMBtu heat input not to exceed 13.03 tons/year, as determined by EPA Test Method 7, 40 CFR 60, Appendix A.   |
| Carbon Monoxide            | 0.04 lbs/MMBtu heat input not to exceed 14.1 tons/year, as determined by EPA Test Method 10, 40 CFR 60, Appendix A   |
| Volatile Organic Compounds | 0.015 lbs/MMBtu heat input not to exceed 5.3 tons/year, as determined by EPA Test Method 25, 40 CFR 60, Appendix A   |
| Sulfuric Acid              | 0.08 lbs/hr and 0.19 tons/year, as determined by EPA Test Method 8, 40 CFR 60, Appendix A.   |
| Opacity                    | 40% as determined by EPA Test Method 9, 40 CFR 60, Appendix A.   |

All test methods specified above shall be those versions, or their approved equivalents,

which are in effect January 6, 2003.

- \* The particulate matter, nitrogen oxides, carbon monoxide and volatile organic compounds emission limitations established in a previous Permit to Construct issued September 24, 1996.

### **FUEL RESTRICTIONS**

Fuels other than Natural Gas and Refinery Fuel Gas (RFG) are prohibited.

### **STANDARD FOR SULFUR DIOXIDE**

The permittee shall not combust any fuel gas that contains Hydrogen Sulfide (H<sub>2</sub>S) in excess of 0.10 grains/dry standard cubic feet (gr/dscf).

### **TEST METHODS AND PROCEDURES**

Within 60 days after achieving the maximum production rate at which Emission Point AA-162 will be operated, but no later than 180 days of any physical (or operational) change to the rerun column reboiler furnace (see Part III, Notification Requirements, item 11), the permittee shall demonstrate compliance with the sulfur dioxide (SO<sub>2</sub>) and sulfuric acid emission limitation by stack testing as specified below:

- (1) Sulfur Dioxide utilizing EPA Reference Method 6
- (2) Sulfuric Acid utilizing EPA Reference Method 8

For the purpose of demonstrating compliance, the permittee shall operate the emission unit at its maximum capacity.

A pretest conference at least thirty (30) days prior to the scheduled test date is needed to ensure that all test methods and procedures are acceptable to the Office of Pollution Control. Also, the Office of Pollution Control must be notified prior to the scheduled test date. At least ten (10) days notice shall be given so that an observer may be scheduled to witness the test(s).

### **MONITORING REQUIREMENTS**

The permittee shall record and maintain records of the amounts of each fuel combusted during each day.

The permittee shall collect weekly fuel samples in an as-fired condition and analyze for

sulfur content.

The permittee shall install, calibrate, maintain, and operate an instrument for continuously monitoring and recording the concentration by volume (dry basis, zero percent excess air) of SO<sub>2</sub> emissions into the atmosphere. The monitor shall include an oxygen monitor for correcting the data for excess air.

In place of the SO<sub>2</sub> monitor, an instrument for continuously monitoring and recording the concentration (dry basis) of H<sub>2</sub>S in fuel gases before being burned in a fuel gas combustion device may be used.

- (i) The span value for this instrument is 0.186 grains/dry standard cubic feet (gr/dscf) H<sub>2</sub>S.
- (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 H<sub>2</sub>S in the fuel gas being burned.
- (iii) The performance evaluations for this H<sub>2</sub>S monitor under § 60.13(c) shall use Performance Specification 7. Method 11 shall be used for conducting the relative accuracy evaluations.

**PART II**  
**EMISSION LIMITATIONS AND MONITORING REQUIREMENTS**

Beginning January 6, 2003, the permittee is authorized to construct air emissions equipment for the emission of air contaminants from the Reformate Distillation Unit, Emission Point AA-165, the 128.8 MMBTUH Rerun Column Reboiler Furnace equipped with Ultra-Low-NO<sub>x</sub> burners to reduce Nitrogen Oxide emissions (Reference No. F-5327C).

The air emissions equipment shall be constructed to comply with the emission limitations and monitoring requirements specified below.

**EMISSION LIMITATIONS\***

|                            |  |
|----------------------------|--|
| Particulate Matter         | 0.02 lbs/MMBtu heat input not to exceed 11.3 tons/year, as determined by EPA Test Methods 1-5, 40 CFR 60, Appendix A.  |
| PM <sub>10</sub>           | 0.02 lbs/MMBtu heat input not to exceed 11.3 tons/year, as determined by EPA Test Method 201 or 201A in conjunction with Test Method 202, 40 CFR 51, Appendix M. |
| Sulfur Dioxide             | 7.92 lbs/hr and 19.97 tons/year, as determined by EPA Test Method 6, 40 CFR 60, Appendix A.  |
| Nitrogen Oxides            | 0.037 lbs/MMBtu heat input not to exceed 20.85 tons/year, as determined by EPA Test Method 7, 40 CFR 60, Appendix A.   |
| Carbon Monoxide            | 0.04 lbs/MMBtu heat input not to exceed 22.56 tons/year, as determined by EPA Test Method 10, 40 CFR 60, Appendix A  |
| Volatile Organic Compounds | 0.015 lbs/MMBtu heat input not to exceed 8.45 tons/year, as determine by EPA Test Method 25, 40 CFR 60, Appendix A   |
| Sulfuric Acid              | 0.12 lbs/hr and 0.31 tons/year, as determined by EPA Test Method 8, 40 CFR 60, Appendix A.   |
| Opacity                    | 40% as determined by EPA Test Method 9, 40 CFR 60, Appendix A.   |

All test methods specified above shall be those versions, or their approved equivalents, which are in effect January 6, 2003.

- \* The particulate matter, nitrogen oxides emission, carbon monoxide and volatile organic compounds limitation established in a previous Permit to Construct issued September 24, 1996.

### **FUEL RESTRICTIONS**

Fuels other than Natural Gas and Refinery Fuel Gas (RFG) are prohibited.

### **STANDARD FOR SULFUR DIOXIDE**

The permittee shall not combust any fuel gas that contains Hydrogen Sulfide (H<sub>2</sub>S) in excess of 0.10 grains/dry standard cubic feet (gr/dscf).

### **TEST METHODS AND PROCEDURES**

Within 60 days after achieving the maximum production rate at which Emission Point AA-165 will be operated, but no later than 180 days of any physical (or operational) change to the rerun column reboiler furnace (see Part III, Notification Requirements, item 11), the permittee shall demonstrate compliance with the sulfur dioxide (SO<sub>2</sub>) and sulfuric acid emission limitation by stack testing as specified below:

- (1) Sulfur Dioxide utilizing EPA Reference Method 6
- (2) Sulfuric Acid utilizing EPA Reference Method 8

For the purpose of demonstrating compliance, the permittee shall operate the emission unit at its maximum capacity.

A pretest conference at least thirty (30) days prior to the scheduled test date is needed to ensure that all test methods and procedures are acceptable to the Office of Pollution Control. Also, the Office of Pollution Control must be notified prior to the scheduled test date. At least ten (10) days notice shall be given so that an observer may be scheduled to witness the test(s).

### **MONITORING REQUIREMENTS**

The permittee shall record and maintain records of the amounts of each fuel combusted during each day.

The permittee shall collect weekly fuel samples in an as-fired condition and analyze for sulfur content.

The permittee shall install, calibrate, maintain, and operate an instrument for continuously monitoring and recording the concentration by volume (dry basis, zero percent excess air) of SO<sub>2</sub> emissions into the atmosphere. The monitor shall include an oxygen monitor for correcting the data for excess air.

In place of the SO<sub>2</sub> monitor, an instrument for continuously monitoring and recording the concentration (dry basis) of H<sub>2</sub>S in fuel gases before being burned in a fuel gas combustion device.

- (i) The span value for this instrument is 0.186 grains/dry standard cubic feet (gr/dscf) H<sub>2</sub>S.
- (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 H<sub>2</sub>S in the fuel gas being burned.
- (iii) The performance evaluations for this H<sub>2</sub>S monitor under § 60.13(c) shall use Performance Specification 7. Method 11 shall be used for conducting the relative accuracy evaluations.

**PART II**  
**EMISSION LIMITATIONS AND MONITORING REQUIREMENTS**

Beginning January 6, 2003, the permittee is authorized to construct air emissions equipment for the emission of air contaminants from the Isomerization Distillation & Reactor Unit, Emission Point AA-174, the 209.7 MMBTUH Raffinate Column Reboiler Furnace equipped with Ultra-Low-NO<sub>x</sub> burners to reduce Nitrogen Oxide emissions (Reference No. F-5337C).

The air emissions equipment shall be constructed to comply with the emission limitations and monitoring requirements specified below.

**EMISSION LIMITATIONS\***

|                            |   |
|----------------------------|---|
| Particulate Matter         | 0.02 lbs/MMBtu heat input not to exceed 18.35 tons/year, as determined by EPA Test Methods 1-5, 40 CFR 60, Appendix A   |
| PM <sub>10</sub>           | 0.02 lbs/MMBtu heat input not to exceed 18.35 tons/year, as determined by EPA Test Method 201 or 201A in conjunction with Test Method 202, 40 CFR 51, Appendix M. |
| Sulfur Dioxide             | 12.90 lbs/hr and 32.51 tons/year, as determined by EPA Test Method 6, 40 CFR 60, Appendix A.  |
| Nitrogen Oxides            | 0.037 lbs/MMBtu heat input not to exceed 33.99 tons/year, as determined by EPA Test Method 7, 40 CFR 60, Appendix A   |
| Carbon Monoxide            | 0.04 lbs/MMBtu heat input not to exceed 36.75 tons/year, as determined by EPA Test Method 10, 40 CFR 60, Appendix A   |
| Volatile Organic Compounds | 0.015 lbs/MMBtu heat input, not to exceed 13.8 tons/year, as determined by EPA Test Method 25, 40 CFR 60, Appendix A  |
| Sulfuric Acid              | 0.20 lbs/hr and 0.50 tons/year, as determined by EPA Test Method 8, 40 CFR 60, Appendix A.  |
| Opacity                    | 40% as determined by EPA Test Method 9, 40 CFR 60, Appendix A.  |

All test methods specified above shall be those versions, or their approved equivalents,

which are in effect January 6, 2003.

- \* The particulate matter, nitrogen oxides, carbon monoxides and volatile organic compounds emission limitation established in a previous Permit to Construct issued September 24, 1996.

### **FUEL RESTRICTIONS**

Fuels other than Natural Gas and Refinery Fuel Gas (RFG) are prohibited.

### **STANDARD FOR SULFUR DIOXIDE**

The permittee shall not combust any fuel gas that contains Hydrogen Sulfide (H<sub>2</sub>S) in excess of 0.10 grains/dry standard cubic feet (gr/dscf).

### **TEST METHODS AND PROCEDURES**

Within 60 days after achieving the maximum production rate at which Emission Point AA-174 will be operated, but no later than 180 days of any physical (or operational) change to the raffinate column reboiler furnace (see Part III, Notification Requirements, item 11), the permittee shall demonstrate compliance with the sulfur dioxide (SO<sub>2</sub>) and sulfuric acid emission limitation by stack testing as specified below:

- (1) Sulfur Dioxide utilizing EPA Reference Method 6
- (2) Sulfuric Acid utilizing EPA Reference Method 8

For the purpose of demonstrating compliance, the permittee shall operate the emission unit at its maximum capacity.

A pretest conference at least thirty (30) days prior to the scheduled test date is needed to ensure that all test methods and procedures are acceptable to the Office of Pollution Control. Also, the Office of Pollution Control must be notified prior to the scheduled test date. At least ten (10) days notice shall be given so that an observer may be scheduled to witness the test(s).

### **MONITORING REQUIREMENTS**

The permittee shall record and maintain records of the amounts of each fuel combusted during each day.

The permittee shall collect weekly fuel samples in an as-fired condition and analyze for sulfur content.

The permittee shall install, calibrate, maintain, and operate an instrument for continuously monitoring and recording the concentration by volume (dry basis, zero percent excess air) of SO<sub>2</sub> emissions into the atmosphere. The monitor shall include an oxygen monitor for correcting the data for excess air.

In place of the SO<sub>2</sub> monitor, an instrument for continuously monitoring and recording the concentration (dry basis) of H<sub>2</sub>S in fuel gases before being burned in a fuel gas combustion device may be used.

- (i) The span value for this instrument is 0.186 grains/dry standard cubic feet (gr/dscf) H<sub>2</sub>S.
- (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 H<sub>2</sub>S in the fuel gas being burned.
- (iii) The performance evaluations for this H<sub>2</sub>S monitor under § 60.13(c) shall use Performance Specification 7. Method 11 shall be used for conducting the relative accuracy evaluations.

**PART II**  
**EMISSION LIMITATIONS AND MONITORING REQUIREMENTS**

Beginning January 6, 2003, the permittee is authorized to construct air emissions equipment for the emission of air contaminants from the Isomerization Distillation & Reactor Unit, Emission Point AA-191, the 97.2 MMBTUH Raffinate Column Reboiler Furnace equipped with Ultra-Low-NO<sub>x</sub> burners to reduce Nitrogen Oxide emissions (Reference No. F-5337A).

The air emissions equipment shall be constructed to comply with the emission limitations and monitoring requirements specified below.

**EMISSION LIMITATIONS** \*

|                            |   |
|----------------------------|---|
| Particulate Matter         | 0.02 lbs/MMBtu heat input not to exceed 8.5 tons/year, as determined by EPA Test Methods 1-5, 40 CFR 60, Appendix A   |
| PM <sub>10</sub>           | 0.02 lbs/MMBtu heat input not to exceed 8.5 tons/year, as determined by EPA Test Method 201 or 201A in conjunction with Test Method 202, 40 CFR 51, Appendix M. |
| Sulfur Dioxide             | 5.97 lbs/hr and 15.07 tons/year, as determined by EPA Test Method 6, 40 CFR 60, Appendix A.   |
| Nitrogen Oxides            | 0.037 lbs/MMBtu heat input, not to exceed 15.72 tons/year, as determined by EPA Test Method 7, 40 CFR 60, Appendix A  |
| Carbon Monoxide            | 0.04 lbs/MMBtu heat input, not to exceed 17.04 tons/year, as determined by EPA Test Method 10, 40 CFR 60, Appendix A  |
| Volatile Organic Compounds | 0.015 lbs/MMBtu heat input, not to exceed 6.39 tons/year, as determined by EPA Test Method 25, 40 CFR 60, Appendix A  |
| Sulfuric Acid              | 0.09 lbs/hr and 0.23 tons/year, as determined by EPA Test Method 8, 40 CFR 60, Appendix A.  |
| Opacity                    | 40% as determined by EPA Test Method 9, 40 CFR 60, Appendix A.  |

All test methods specified above shall be those versions, or their approved equivalents,

which are in effect January 6, 2003.

- \* The particulate matter, nitrogen oxides, carbon monoxide and volatile organic compounds emission limitations established in a previous Permit to Construct issued September 24, 1996.

### **FUEL RESTRICTIONS**

Fuels other than Natural Gas and Refinery Fuel Gas (RFG) are prohibited.

### **STANDARD FOR SULFUR DIOXIDE**

The permittee shall not combust any fuel gas that contains Hydrogen Sulfide (H<sub>2</sub>S) in excess of 0.10 grains/dry standard cubic feet (gr/dscf).

### **TEST METHODS AND PROCEDURES**

Within 60 days after achieving the maximum production rate at which Emission Point AA-191 will be operated, but no later than 180 days of any physical (or operational) change to the raffinate column reboiler furnace (see Part III, Notification Requirements, item 11), the permittee shall demonstrate compliance with the sulfur dioxide (SO<sub>2</sub>) and sulfuric acid emission limitation by stack testing as specified below:

- (1) Sulfur Dioxide utilizing EPA Reference Method 6
- (2) Sulfuric Acid utilizing EPA Reference Method 8

For the purpose of demonstrating compliance, the permittee shall operate the emission unit at its maximum capacity.

A pretest conference at least thirty (30) days prior to the scheduled test date is needed to ensure that all test methods and procedures are acceptable to the Office of Pollution Control. Also, the Office of Pollution Control must be notified prior to the scheduled test date. At least ten (10) days notice shall be given so that an observer may be scheduled to witness the test(s).

### **MONITORING REQUIREMENTS**

The permittee shall record and maintain records of the amounts of each fuel combusted during each day.

The permittee shall collect weekly fuel samples in an as-fired condition and analyze for sulfur content.

The permittee shall install, calibrate, maintain, and operate an instrument for continuously monitoring and recording the concentration by volume (dry basis, zero percent excess air) of SO<sub>2</sub> emissions into the atmosphere. The monitor shall include an oxygen monitor for correcting the data for excess air.

In place of the SO<sub>2</sub> monitor, an instrument for continuously monitoring and recording the concentration (dry basis) of H<sub>2</sub>S in fuel gases before being burned in a fuel gas combustion device may be used.

- (i) The span value for this instrument is 0.186 grains/dry standard cubic feet (gr/dscf) H<sub>2</sub>S.
- (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 H<sub>2</sub>S in the fuel gas being burned.
- (iii) The performance evaluations for this H<sub>2</sub>S monitor under § 60.13(c) shall use Performance Specification 7. Method 11 shall be used for conducting the relative accuracy evaluations.

**PART II**  
**EMISSION LIMITATIONS AND MONITORING REQUIREMENTS**

Beginning January 6, 2003, the permittee is authorized to construct air emissions equipment for the emission of air contaminants from the Isomerization Distillation & Reactor Unit, Emission Point AA-192, the 90.8 MMBTUH Raffinate Column Reboiler Furnace equipped with Ultra-Low-NO<sub>x</sub> burners to reduce Nitrogen Oxide emissions (Reference No. F-5337B).

The air emissions equipment shall be constructed to comply with the emission limitations and monitoring requirements specified below.

**EMISSION LIMITATIONS\***

|                            |  |
|----------------------------|--|
| Particulate Matter         | 0.02 lbs/MMBtu Heat input not to exceed 7.97 tons/year, as determined by EPA Test Methods 1-5, 40 CFR 60, Appendix A.  |
| PM <sub>10</sub>           | 0.02 lbs/MMBtu heat input not to exceed 7.97 tons/year, as determined by EPA Test Method 201 or 201A in conjunction with Test Method 202, 40 CFR 51, Appendix M. |
| Sulfur Dioxide             | 5.58 lbs/hr and 14.07 tons/year, as determined by EPA Test Method 6, 40 CFR 60, Appendix A.  |
| Nitrogen Oxides            | 0.037 lbs/MMBtu heat input, not to exceed 14.72 tons/year, as determine by EPA Test Method 7, 40 CFR 60, Appendix A.   |
| Carbon Monoxide            | 0.04 lbs/MMBtu heat input, not to exceed 15.9 tons/year, as determined by EPA Test Method 10, 40 CFR 60, Appendix A  |
| Volatile Organic Compounds | 0.015 lbs/MMBtu heat input, not to exceed 5.96 tons/year, as determined by EPA Test Method 25, 40 CFR 60, Appendix A   |
| Sulfuric Acid              | 0.09 lbs/hr and 0.22 tons/year, as determined by EPA Test Method 8, 40 CFR 60, Appendix A.   |
| Opacity                    | 40% as determined by EPA Test Method 9, 40 CFR 60, Appendix A.   |

All test methods specified above shall be those versions, or their approved equivalents, which are in effect January 6, 2003.

- \* The particulate matter, nitrogen oxides, carbon monoxide and volatile organic compounds emission limitations established in a previous Permit to Construct issued September 26, 1996.

### **FUEL RESTRICTIONS**

Fuels other than Natural Gas and Refinery Fuel Gas (RFG) are prohibited.

### **STANDARD FOR SULFUR DIOXIDE**

The permittee shall not combust any fuel gas that contains Hydrogen Sulfide (H<sub>2</sub>S) in excess of 0.10 grains/dry standard cubic feet (gr/dscf).

### **TEST METHODS AND PROCEDURES**

Within 60 days after achieving the maximum production rate at which Emission Point AA-192 will be operated, but no later than 180 days of any physical (or operational) change to the raffinate column reboiler furnace (see Part III, Notification Requirements, item 11), the permittee shall demonstrate compliance with the sulfur dioxide (SO<sub>2</sub>) and sulfuric acid emission limitation by stack testing as specified below:

- (1) Sulfur Dioxide utilizing EPA Reference Method 6
- (2) Sulfuric Acid utilizing EPA Reference Method 8

For the purpose of demonstrating compliance, the permittee shall operate the emission unit at its maximum capacity.

A pretest conference at least thirty (30) days prior to the scheduled test date is needed to ensure that all test methods and procedures are acceptable to the Office of Pollution Control. Also, the Office of Pollution Control must be notified prior to the scheduled test date. At least ten (10) days notice shall be given so that an observer may be scheduled to witness the test(s).

### **MONITORING REQUIREMENTS**

The permittee shall record and maintain records of the amounts of each fuel combusted during each day.

The permittee shall collect weekly fuel samples in an as-fired condition and analyze for sulfur content.

The permittee shall install, calibrate, maintain, and operate an instrument for continuously monitoring and recording the concentration by volume (dry basis, zero percent excess air) of SO<sub>2</sub> emissions into the atmosphere. The monitor shall include an oxygen monitor for correcting the data for excess air.

In place of the SO<sub>2</sub> monitor, an instrument for continuously monitoring and recording the concentration (dry basis) of H<sub>2</sub>S in fuel gases before being burned in a fuel gas combustion device may be used.

- (i) The span value for this instrument is 0.186 grains/dry standard cubic feet (gr/dscf) H<sub>2</sub>S.
- (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 H<sub>2</sub>S in the fuel gas being burned.
- (iii) The performance evaluations for this H<sub>2</sub>S monitor under § 60.13(c) shall use Performance Specification 7. Method 11 shall be used for conducting the relative accuracy evaluations.

**PART II**  
**EMISSION LIMITATIONS AND MONITORING REQUIREMENTS**

Beginning January 6, 2003, the permittee is authorized to construct air emissions equipment for the emission of air contaminants from the Isomerization Distillation & Reactor Unit, Emission Point AA-193, the 39.5 MMBTUH Reactor Feed Furnace (Reference No. F-5380A).

The air emissions equipment shall be constructed to comply with the emission limitations and monitoring requirements specified below.

**EMISSION LIMITATIONS \***

|                            |  |
|----------------------------|--|
| Particulate Matter         | 0.02 lbs/MMBtu Heat input not to exceed 2.37 tons/year, as determined by EPA Test Methods 1-5, 40 CFR 60, Appendix A.  |
| PM <sub>10</sub>           | 0.02 lbs/MMBtu heat input not to exceed 2.37 tons/year, as determined by EPA Test Method 201 or 201A in conjunction with Test Method 202, 40 CFR 51, Appendix M. |
| Sulfur Dioxide             | 2.43 lbs/hr and 6.12 tons/year, as determined by EPA Test Method 6, 40 CFR 60, Appendix A.   |
| Nitrogen Oxides            | 0.14 lbs/MMBtu heat input, not to exceed 24.22 tons/year, as determined by EPA Test Method 7, 40 CFR 60, Appendix A.   |
| Carbon Monoxide            | 0.035 lbs/MMBtu heat input, not to exceed 6.04 tons/year, as determined by EPA Test Method 10, 40 CFR 60, Appendix A   |
| Volatile Organic Compounds | 0.0028 lbs/MMBtu heat input, not to exceed 0.48 tons/year, as determined by EPA Test Method 25, 40 CFR 60, Appendix A  |
| Sulfuric Acid              | 0.04 lbs/hr and 0.09 tons/year, as determined by EPA Test Method 8, 40 CFR 60, Appendix A.   |
| Opacity                    | 40% as determined by EPA Test Method 9, 40 CFR 60, Appendix A.   |

All test methods specified above shall be those versions, or their approved equivalents, which are in effect January 6, 2003.

\* The particulate matter, nitrogen oxides, carbon monoxide and volatile organic compounds emission limitation established in a previous Permit to Construct issued

September 26, 1996.

### **FUEL RESTRICTIONS**

Fuels other than Natural Gas and Refinery Fuel Gas (RFG) are prohibited.

### **STANDARD FOR SULFUR DIOXIDE**

The permittee shall not combust any fuel gas that contains Hydrogen Sulfide (H<sub>2</sub>S) in excess of 0.10 grains/dry standard cubic feet (gr/dscf).

### **TEST METHODS AND PROCEDURES**

Within 60 days after achieving the maximum production rate at which Emission Point AA-193 will be operated, but no later than 180 days of any physical (or operational) change to the reactor feed furnace (see Part III, Notification Requirements, item 11), the permittee shall demonstrate compliance with the sulfur dioxide (SO<sub>2</sub>) and sulfuric acid emission limitation by stack testing as specified below:

- (1) Sulfur Dioxide utilizing EPA Reference Method 6
- (2) Sulfuric Acid utilizing EPA Reference Method 8

For the purpose of demonstrating compliance, the permittee shall operate the emission unit at its maximum capacity.

A pretest conference at least thirty (30) days prior to the scheduled test date is needed to ensure that all test methods and procedures are acceptable to the Office of Pollution Control. Also, the Office of Pollution Control must be notified prior to the scheduled test date. At least ten (10) days notice shall be given so that an observer may be scheduled to witness the test(s).

### **MONITORING REQUIREMENTS**

The permittee shall record and maintain records of the amounts of each fuel combusted during each day.

The permittee shall collect weekly fuel samples in an as-fired condition and analyze for sulfur content.

The permittee shall install, calibrate, maintain, and operate an instrument for continuously monitoring and recording the concentration by volume (dry basis, zero percent excess air)

of SO<sub>2</sub> emissions into the atmosphere. The monitor shall include an oxygen monitor for correcting the data for excess air.

In place of the SO<sub>2</sub> monitor, an instrument for continuously monitoring and recording the concentration (dry basis) of H<sub>2</sub>S in fuel gases before being burned in a fuel gas combustion device may be used.

- (i) The span value for this instrument is 0.186 grains/dry standard cubic feet (gr/dscf) H<sub>2</sub>S.
- (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 H<sub>2</sub>S in the fuel gas being burned.
- (iii) The performance evaluations for this H<sub>2</sub>S monitor under § 60.13(c) shall use Performance Specification 7. Method 11 shall be used for conducting the relative accuracy evaluations.

**PART II**  
**EMISSION LIMITATIONS AND MONITORING REQUIREMENTS**

Beginning January 6, 2003, the permittee is authorized to construct air emissions equipment for the emission of air contaminants from the Isomerization Distillation & Reactor Unit, Emission Point AA-194, the 39.5 MMBTUH Reactor Feed Furnace (Reference No. F-5380B).

The air emissions equipment shall be constructed to comply with the emission limitations and monitoring requirements specified below.

**EMISSION LIMITATIONS** \*

|                            |  |
|----------------------------|--|
| Particulate Matter         | 0.0137 lbs/MMBtu heat input not to exceed 2.37 tons/year, as determined by EPA Test Methods 1-5, 40 CFR 60, Appendix A.  |
| PM <sub>10</sub>           | 0.0137 lbs/MMBtu heat input not to exceed 2.37 tons/year, as determined by EPA Test Method 201 or 201A in conjunction with Test Method 202, 40 CFR 51, Appendix M. |
| Sulfur Dioxide             | 2.43 lbs/hr and 6.12 tons/year, as determined by EPA Test Method 6, 40 CFR 60, Appendix A.   |
| Nitrogen Oxides            | 0.14 lbs/MMBtu heat input, not to exceed 24.22 tons/year, as determined by EPA Test Method 7, 40 CFR 60, Appendix A.   |
| Carbon Monoxide            | 0.035 lbs/MMBTU heat input, not to exceed 6.04 tons/year, as determined by EPA Test Method 10, 40 CFR 60, Appendix A   |
| Volatile Organic Compounds | 0.0028 lbs/MMBtu heat input, not to exceed 0.48 tons/year, as determined by EPA Test Method 25, 40 CFR 60, Appendix A  |
| Sulfuric Acid              | 0.04 lbs/hr and 0.09 tons/year, as determined by EPA Test Method 8, 40 CFR 60, Appendix A.   |
| Opacity                    | 40% as determined by EPA Test Method 9, 40 CFR 60, Appendix A.   |

All test methods specified above shall be those versions, or their approved equivalents, which are in effect January 6, 2003.

\* The particulate matter and nitrogen oxides emission limitation established in a previous

Permit to Construct issued September 26, 1996.

### **FUEL RESTRICTIONS**

Fuels other than Natural Gas and Refinery Fuel Gas (RFG) are prohibited.

### **STANDARD FOR SULFUR DIOXIDE**

The permittee shall not combust any fuel gas that contains Hydrogen Sulfide (H<sub>2</sub>S) in excess of 0.10 grains/dry standard cubic feet (gr/dscf).

### **TEST METHODS AND PROCEDURES**

Within 60 days after achieving the maximum production rate at which Emission Point AA-194 will be operated, but no later than 180 days of any physical (or operational) change to the reactor feed furnace (see Part III, Notification Requirements, item 11), the permittee shall demonstrate compliance with the sulfur dioxide (SO<sub>2</sub>) and sulfuric acid emission limitation by stack testing as specified below:

- (1) Sulfur Dioxide utilizing EPA Reference Method 6
- (2) Sulfuric Acid utilizing EPA Reference Method 8

For the purpose of demonstrating compliance, the permittee shall operate the emission unit at its maximum capacity.

A pretest conference at least thirty (30) days prior to the scheduled test date is needed to ensure that all test methods and procedures are acceptable to the Office of Pollution Control. Also, the Office of Pollution Control must be notified prior to the scheduled test date. At least ten (10) days notice shall be given so that an observer may be scheduled to witness the test(s).

### **MONITORING REQUIREMENTS**

The permittee shall record and maintain records of the amounts of each fuel combusted during each day.

The permittee shall collect weekly fuel samples in an as-fired condition and analyze for sulfur content.

The permittee shall install, calibrate, maintain, and operate an instrument for continuously monitoring and recording the concentration by volume (dry basis, zero percent excess air) of SO<sub>2</sub> emissions into the atmosphere. The monitor shall include an oxygen monitor for

correcting the data for excess air.

In place of the SO<sub>2</sub> monitor, an instrument for continuously monitoring and recording the concentration (dry basis) of H<sub>2</sub>S in fuel gases before being burned in a fuel gas combustion device may be used.

- (i) The span value for this instrument is 0.186 grains/dry standard cubic feet (gr/dscf) H<sub>2</sub>S.
- (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 H<sub>2</sub>S in the fuel gas being burned.
- (iii) The performance evaluations for this H<sub>2</sub>S monitor under § 60.13(c) shall use Performance Specification 7. Method 11 shall be used for conducting the relative accuracy evaluations.

**PART II**  
**EMISSION LIMITATIONS AND MONITORING REQUIREMENTS**

Beginning January 6, 2003, the permittee is authorized to construct air emissions equipment for the emission of air contaminants from the Isomerization Distillation & Reactor Unit, Emission Point AA-195, the 19.3 MMBTUH Reactor Drier Regenerator (Reference No. F-5387).

The air emissions equipment shall be constructed to comply with the emission limitations and monitoring requirements specified below.

**EMISSION LIMITATIONS \***

|                            |  |
|----------------------------|--|
| Particulate Matter         | 0.0137 lbs/MMBtu heat input not to exceed 1.14 tons/year, as determined by EPA Test Methods 1-5, 40 CFR 60, Appendix A.  |
| PM <sub>10</sub>           | 0.0137 lbs/MMBtu heat input not to exceed 1.14 tons/year, as determined by EPA Test Method 201 or 201A in conjunction with Test Method 202, 40 CFR 51, Appendix M. |
| Sulfur Dioxide             | 1.19 lbs/hr and 2.99 tons/year, as determined by EPA Test Method 6, 40 CFR 60, Appendix A.   |
| Nitrogen Oxides            | 0.14 lbs/MMBtu heat input, not to exceed 11.83 tons/year, as determined by EPA Test Method 7, 40 CFR 60, Appendix A  |
| Carbon Monoxide            | 0.035 lbs/MMBtu heat input, not to exceed 2.93 tons/year, as determined by EPA Test Method 10, 40 CFR 60, Appendix A   |
| Volatile Organic Compounds | 0.0028 lbs/MMBtu heat input, not to exceed 0.22 tons/year, as determined by EPA Test Method 25, 40 CFR 60, Appendix A  |
| Sulfuric Acid              | 0.02 lbs/hr and 0.05 tons/year, as determined by EPA Test Method 8, 40 CFR 60, Appendix A.   |
| Opacity                    | 40% as determined by EPA Test Method 9, 40 CFR 60, Appendix A.   |

All test methods specified above shall be those versions, or their approved equivalents, which are in effect January 6, 2003.

- \* The particulate matter, nitrogen oxide, carbon monoxide and volatile organic compounds emission limitation established in a previous Permit to Construct issued September 26, 1996.

### **FUEL RESTRICTIONS**

Fuels other than Natural Gas and Refinery Fuel Gas (RFG) are prohibited.

### **STANDARD FOR SULFUR DIOXIDE**

The permittee shall not combust any fuel gas that contains Hydrogen Sulfide (H<sub>2</sub>S) in excess of 0.10 grains/dry standard cubic feet (gr/dscf).

### **TEST METHODS AND PROCEDURES**

Within 60 days after achieving the maximum production rate at which Emission Point AA-195 will be operated, but no later than 180 days of any physical (or operational) change to the reactor drier regenerator (see Part III, Notification Requirements, item 11), the permittee shall demonstrate compliance with the sulfur dioxide (SO<sub>2</sub>) and sulfuric acid emission limitation by stack testing as specified below:

- (1) Sulfur Dioxide utilizing EPA Reference Method 6
- (2) Sulfuric Acid utilizing EPA Reference Method 8

For the purpose of demonstrating compliance, the permittee shall operate the emission unit at its maximum capacity.

A pretest conference at least thirty (30) days prior to the scheduled test date is needed to ensure that all test methods and procedures are acceptable to the Office of Pollution Control. Also, the Office of Pollution Control must be notified prior to the scheduled test date. At least ten (10) days notice shall be given so that an observer may be scheduled to witness the test(s).

### **MONITORING REQUIREMENTS**

The permittee shall record and maintain records of the amounts of each fuel combusted during each day.

The permittee shall collect weekly fuel samples in an as-fired condition and analyze for sulfur content.

The permittee shall install, calibrate, maintain, and operate an instrument for continuously monitoring and recording the concentration by volume (dry basis, zero percent excess air) of SO<sub>2</sub> emissions into the atmosphere. The monitor shall include an oxygen monitor for correcting the data for excess air.

In place of the SO<sub>2</sub> monitor, an instrument for continuously monitoring and recording the concentration (dry basis) of H<sub>2</sub>S in fuel gases before being burned in a fuel gas combustion device may be used.

- (i) The span value for this instrument is 0.186 grains/dry standard cubic feet (gr/dscf) H<sub>2</sub>S.
- (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 H<sub>2</sub>S in the fuel gas being burned.
- (iii) The performance evaluations for this H<sub>2</sub>S monitor under § 60.13(c) shall use Performance Specification 7. Method 11 shall be used for conducting the relative accuracy evaluations.

**PART II**  
**EMISSION LIMITATIONS AND MONITORING REQUIREMENTS**

Beginning October 11, 2005, the permittee is authorized to construct air emissions equipment for the emission of air contaminants from the Crude Unit II & Distillate Treaters (Plant 61), Emission Point BE-211 (formerly AA-211 and AA-212), the 325 MMBTUH Process Heater (Reference No. F-6101) and the 200 MMBTUH Process Heater (Reference No. F-6102), which share a common stack.

The air emissions equipment shall be constructed to comply with the emission limitations and monitoring requirements specified below.

**EMISSION LIMITATIONS**

|                    |  |
|--------------------|--|
| Particulate Matter | 5.87 lbs/hr and 17.13 tons/year, as determined by EPA Test Methods 1-5, 40 CFR 60, Appendix A.   |
| PM <sub>10</sub>   | 5.87 lbs/hr and 17.13 tons/year as determined by EPA Test Method 201 or 201A in conjunction with Test Method 202, 40 CFR 51, Appendix M. |
| Sulfur Dioxide     | 33.54 lbs/hr and 93.04 tons/year, as determined by EPA Test Method 6, 40 CFR 60, Appendix A.   |
| Nitrogen Oxides    | 315.00 lbs/hr and 919.80 tons/year, as determined by EPA Test Method 7, 40 CFR 60, Appendix A.   |
| Carbon Monoxide    | 142.12 lbs/hr and 166.00 tons/year, as determined by EPA Test Method 10, 40 CFR 60, Appendix A.  |
| Sulfuric Acid      | 0.55 lbs/hr and 1.54 tons/year, as determined by EPA Test Method 8, 40 CFR 60, Appendix A.   |
| Opacity            | 40% as determined by EPA Test Method 9, 40 CFR 60, Appendix A.   |

\*The limits above are for the total combined emissions from both process heaters.

All test methods specified above shall be those versions, or their approved equivalents, which are in effect October 11, 2005.

### **FUEL RESTRICTIONS FOR F-6101**

Fuels other than Vacuum Column Offgas, Plant 40 Merox Regenerator Gas, Chevron Sweetening Process Offgas, Natural Gas and Refinery Fuel Gas (RFG) are prohibited.

The permittee shall limit operation of F-6101 to an annual capacity factor less than 10 percent (0.10) for vacuum column overhead gas.

### **FUEL RESTRICTIONS FOR F-6102**

Fuels other than Natural Gas and Refinery Fuel Gas (RFG) are prohibited.

### **TEST METHODS AND PROCEDURES**

By April 11, 2006, the permittee shall demonstrate compliance with the emission limitations for the following pollutants by stack testing as specified below:

- (1) Particulate Matter utilizing EPA Reference Methods 1 - 5
- (2) Sulfur Dioxide utilizing EPA Reference Method 6
- (3) Carbon Monoxide utilizing EPA Reference Method 10
- (4) Nitrogen Oxides utilizing EPA Reference Method 7, 7A or 7E.
- (5) Opacity utilizing EPA Reference Method 9 (6-minute average of 24 observations)

For the purpose of demonstrating compliance, the permittee shall operate both process heaters simultaneously at or as close to their respective maximum capacities as conditions allow.

For the purpose of demonstrating compliance, opacity observations shall be conducted concurrently with the performance test. If visibility or other conditions prevent the opacity observations from being conducted concurrently with the performance test, the permittee shall reschedule the opacity observations as soon after the performance test as possible, but not later than thirty (30) days thereafter.

A pretest conference at least thirty (30) days prior to the scheduled test date is needed to ensure that all test methods and procedures are acceptable to the Office of Pollution Control. Also, the Office of Pollution Control must be notified prior to the scheduled test date. At least ten (10) days notice shall be given so that an observer may be scheduled to witness the test(s).

### CONTROL DEVICE REQUIREMENTS

For Process Heater F-6101, the C-6102 O/H vent scrubber shall be operated at all times when overhead gas may be vented to F-6101.

### MONITORING REQUIREMENTS

The permittee shall record and maintain records of the amounts of each fuel combusted by each process heater during each day.

The permittee shall collect weekly fuel samples in an as-fired condition and analyze for sulfur content.

The permittee shall install, calibrate, maintain, and operate an instrument for continuously monitoring and recording the concentration by volume (dry basis, zero percent excess air) of SO<sub>2</sub> emissions into the atmosphere. The monitor shall include an oxygen monitor for correcting the data for excess air.

In place of the SO<sub>2</sub> monitor, an instrument for continuously monitoring and recording the concentration (dry basis) of H<sub>2</sub>S in the refinery fuel gas (RFG) before being burned in a fuel gas combustion device may be used.

- (i) The span value for this instrument is 0.186 grains/dry standard cubic feet (gr/dscf) H<sub>2</sub>S.
- (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 H<sub>2</sub>S in the fuel gas being burned.
- (iii) The performance evaluations for this H<sub>2</sub>S monitor under § 60.13(c) shall use Performance Specification 7. Method 11 shall be used for conducting the relative accuracy evaluations.

For Process Heater F-6101, the permittee shall calculate and maintain a record of the annual capacity factor individually for vacuum column overhead gas, refinery fuel gas and natural gas. The annual capacity factor is determined on a 12-month rolling average basis with a new annual capacity factor calculated at the end of each calendar month. The permittee shall calculate the sulfur dioxide and sulfuric acid emission rates if the vacuum column overhead gas equals or exceeds ten percent (0.10) of the unit's annual capacity factor.

For Process Heater F-6101, the permittee shall install, calibrate, maintain, and operate an instrument for continuous measurement of the scrubber liquid flowrate and the maximum vacuum column overhead gas flowrate. The monitoring devices shall be calibrated on an annual basis in accordance

with manufacturers' instructions.

**PART II**  
**EMISSION LIMITATIONS AND MONITORING REQUIREMENTS**

Beginning June 12, 2001, the permittee is authorized to construct air emissions equipment for the emission of air contaminants from the IsoMax II Process, Emission Point AA-221, the 55 MMBTUH Process Heater (Reference No. F-6210).

The air emissions equipment shall be constructed to comply with the emission limitations and monitoring requirements specified below.

**EMISSION LIMITATIONS \***

|                    |  |
|--------------------|--|
| Particulate Matter | 0.452 lbs per MMBtu heat input.  |
| Sulfur Dioxide     | 3.38 lbs/hr and 8.53 tons/year, as determined by EPA Test Method 6, 40 CFR 60, Appendix A. |
| Sulfuric Acid      | 0.05 lbs/hr and 0.13 tons/year, as determined by EPA Test Method 8, 40 CFR 60, Appendix A. |
| Opacity            | 40% as determined by EPA Test Method 9, 40 CFR 60, Appendix A.                             |

All test methods specified above shall be those versions, or their approved equivalents, which are in effect June 12, 2001.

\* The particulate matter emission limitation established in a previous Permit to Construct.

**FUEL RESTRICTIONS**

Fuels other than Natural Gas and Refinery Fuel Gas (RFG) are prohibited.

**MONITORING REQUIREMENTS**

The permittee shall record and maintain records of the amounts of each fuel combusted during each day.

The permittee shall collect weekly fuel samples in an as-fired condition and analyze for sulfur content.

The permittee shall install, calibrate, maintain, and operate an instrument for continuously monitoring and recording the concentration by volume (dry basis, zero percent excess air) of SO<sub>2</sub> emissions into the atmosphere. The monitor shall include an oxygen monitor for

correcting the data for excess air.

In place of the SO<sub>2</sub> monitor, an instrument for continuously monitoring and recording the concentration (dry basis) of H<sub>2</sub>S in fuel gases before being burned in a fuel gas combustion device may be used.

- (i) The span value for this instrument is 0.186 grains/dry standard cubic feet (gr/dscf) H<sub>2</sub>S.
- (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 H<sub>2</sub>S in the fuel gas being burned.
- (iii) The performance evaluations for this H<sub>2</sub>S monitor under § 60.13(c) shall use Performance Specification 7. Method 11 shall be used for conducting the relative accuracy evaluations.

**PART II**  
**EMISSION LIMITATIONS AND MONITORING REQUIREMENTS**

Beginning June 12, 2001, the permittee is authorized to construct air emissions equipment for the emission of air contaminants from the IsoMax II Process, Emission Point AA-222, the 55 MMBTUH Process Heater (Reference No. F-6230).

The air emissions equipment shall be constructed to comply with the emission limitations and monitoring requirements specified below.

**EMISSION LIMITATIONS \***

|                    |  |
|--------------------|--|
| Particulate Matter | 0.452 lbs per MMBtu heat input.  |
| Sulfur Dioxide     | 3.38 lbs/hr and 8.52 tons/year, as determined by EPA Test Method 6, 40 CFR 60, Appendix A. |
| Sulfuric Acid      | 0.05 lbs/hr and 0.13 tons/year, as determined by EPA Test Method 8, 40 CFR 60, Appendix A. |
| Opacity            | 40% as determined by EPA Test Method 9, 40 CFR 60, Appendix A.                             |

All test methods specified above shall be those versions, or their approved equivalents, which are in effect June 12, 2001.

\* The particulate matter emission limitation established in a previous Permit to Construct.

**FUEL RESTRICTIONS**

Fuels other than Natural Gas and Refinery Fuel Gas (RFG) are prohibited.

**MONITORING REQUIREMENTS**

The permittee shall record and maintain records of the amounts of each fuel combusted during each day.

The permittee shall collect weekly fuel samples in an as-fired condition and analyze for sulfur content.

The permittee shall install, calibrate, maintain, and operate an instrument for continuously monitoring and recording the concentration by volume (dry basis, zero percent excess air) of SO<sub>2</sub> emissions into the atmosphere. The monitor shall include an oxygen monitor for correcting the data for excess air.

In place of the SO<sub>2</sub> monitor, an instrument for continuously monitoring and recording the concentration (dry basis) of H<sub>2</sub>S in fuel gases before being burned in a fuel gas combustion device may be used.

- (i) The span value for this instrument is 0.186 grains/dry standard cubic feet (gr/dscf) H<sub>2</sub>S.
- (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 H<sub>2</sub>S in the fuel gas being burned.
- (iii) The performance evaluations for this H<sub>2</sub>S monitor under § 60.13(c) shall use Performance Specification 7. Method 11 shall be used for conducting the relative accuracy evaluations.

**PART II**  
**EMISSION LIMITATIONS AND MONITORING REQUIREMENTS**

Beginning January 6, 2003, the permittee is authorized to construct air emissions equipment for the emission of air contaminants from the IsoMax II Process, Emission Point AA-223, the 304 MMBTUH Process Heater equipped with Ultra-Low-NO<sub>x</sub> burners to reduce Nitrogen Oxide (NO<sub>x</sub>) emissions (Reference No. F-6250).

The air emissions equipment shall be constructed to comply with the emission limitations and monitoring requirements specified below.

**EMISSION LIMITATIONS**

|                    |  |
|--------------------|--|
| Particulate Matter | 3.40 lbs/hr and 9.92 tons/year, as determined by EPA Test Methods 1-5, 40 CFR 60, Appendix A.  |
| PM <sub>10</sub>   | 3.40 lbs/hr and 9.92 tons/year as determined by EPA Test Method 201 or 201A in conjunction with Test Method 202, 40 CFR 51, Appendix M.          |
| Sulfur Dioxide     | 18.70 lbs/hr and 47.14 tons/year, as determined by EPA Test Method 6, 40 CFR 60, Appendix A.   |
| Nitrogen Oxides    | 9.12 lbs/hr and 26.63 tons/year, as determined by EPA Test Method 7, 40 CFR 60, Appendix A.  |
| Carbon Monoxide    | 82.29 lbs/hr and 89.54 tons/year, as determined by EPA Test Method 10, 40 CFR 60, Appendix A.  |
| Sulfuric Acid      | 0.29 lbs/hr and 0.73 tons/year, as determined by EPA Test Method 8, 40 CFR 60, Appendix A.   |
| Opacity            | 20% (6-minute average), except for one 6-minute period per hour of not more than 27%, as determined by EPA Test Method 9, 40 CFR 60, Appendix A. |

All test methods specified above shall be those versions, or their approved equivalents, which are in effect January 6, 2003.

**FUEL RESTRICTIONS**

Fuels other than Natural Gas and Refinery Fuel Gas (RFG) are prohibited.

**TEST METHODS AND PROCEDURES**

Within 60 days after achieving the maximum production rate at which Emission Point AA-223 will be operated, but no later than 180 days of any physical (or operational) change to the IsoMax II Process, process heater (see Part III, Notification Requirements, item 11), the permittee shall demonstrate compliance with the particulate matter (PM/PM10), sulfur dioxide (SO<sub>2</sub>), carbon monoxide (CO), nitrogen oxide (NO<sub>x</sub>), sulfuric acid emission and opacity limitation by stack testing as specified below and biennially thereafter.

- (1) Particulate Matter utilizing EPA Reference Methods 1 - 5
- (2) Sulfur Dioxide utilizing EPA Reference Method 6
- (3) Sulfuric Acid utilizing EPA Reference Method 8
- (4) Carbon Monoxide utilizing EPA Reference Method 10
- (5) Nitrogen Oxides utilizing EPA Reference Method 7, 7A or 7E.
- (6) Opacity utilizing EPA Reference Method 9 (6-minute average of 24 observations)

For the purpose of demonstrating compliance, the permittee shall operate the emission unit at its maximum capacity.

For the purpose of demonstrating compliance, opacity observations shall be conducted concurrently with the performance test. If visibility or other conditions prevent the opacity observations from being conducted concurrently with the performance test, the permittee shall reschedule the opacity observations as soon after the performance test as possible, but not later than thirty (30) days thereafter.

A pretest conference at least thirty (30) days prior to the scheduled test date is needed to ensure that all test methods and procedures are acceptable to the Office of Pollution Control. Also, the Office of Pollution Control must be notified prior to the scheduled test date. At least ten (10) days notice shall be given so that an observer may be scheduled to witness the test(s).

### **MONITORING OF OPERATIONS**

The permittee shall collect weekly fuel samples in an as-fired condition and analyze for sulfur content.

The permittee shall install, calibrate, maintain, and operate an instrument for continuously monitoring and recording the concentration by volume (dry basis, zero percent excess air) of SO<sub>2</sub> emissions into the atmosphere. The monitor shall include an oxygen monitor for

correcting the data for excess air.

In place of the SO<sub>2</sub> monitor, an instrument for continuously monitoring and recording the concentration (dry basis) of H<sub>2</sub>S in fuel gases before being burned in a fuel gas combustion device may be used.

- (i) The span value for this instrument is 0.186 grains/dry standard cubic feet (gr/dscf) H<sub>2</sub>S.
- (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 H<sub>2</sub>S in the fuel gas being burned.
- (iii) The performance evaluations for this H<sub>2</sub>S monitor under § 60.13(c) shall use Performance Specification 7. Method 11 shall be used for conducting the relative accuracy evaluations.

The permittee shall conduct visible emissions tests of Emission Point AA-223 with EPA Reference Test Method 22 of 40 CFR 60, Appendix A, on a daily basis and whenever there is a public complaint of visible emissions. Testing shall be conducted during daylight hours and during conditions representative of normal operation. Observations shall be recorded for at least three (3) 6-minute periods each day. If any visible emissions (not including condensed water vapor) are observed, the permittee shall report the visible emissions as a potential deviation and the permittee shall:

- (a) Within one (1) hour, initiate corrective actions to eliminate the visible emissions. Verify that the air emissions equipment and/or any associated pollution control equipment is operating normally, in accordance with design and standard procedures, and under the same conditions in which compliance was achieved in the past.
- (b) Within 24 hours of the end of the Method 22 test in which visible emissions were observed and at least once per day until there is no indication of visible emissions, a certified visual emissions observer shall conduct an opacity test of each stack from which visible emissions were observed in accordance with EPA Reference Test Method 9, 40 CFR 60, Appendix A. The duration of the method 9 test shall be thirty (30) minutes.

### **RECORDKEEPING AND REPORTING REQUIREMENTS**

The permittee shall maintain sufficient records documenting:

- (a) Identification of stack and/or Emission Point;

- (b) Results of all required visual observations. To include Method 9 testing results when applicable;
- (c) Description of corrective actions taken and a statement of verification, the emission unit and, if applicable, associated pollution control device are operating in accordance with design and standard procedures. Otherwise, operating normally;
- (d) Date and time any visible emissions were abated.

The permittee shall maintain on site all records and data used to determine visible emissions for a period of five (5) years following the date of such record and be made available for review upon request from Mississippi Department of Environmental Quality (MDEQ) personnel.

The permittee shall submit semiannual reports providing an identification of the stack and/or emission point; results of all required visual observations/tests, the nature and cause of any visible emissions, the corrective action taken or preventive measures adopted; and date and time visible emissions were observed and abated.

The report shall be postmarked no later than 30 days following the end of each calendar half.

**PART II**  
**EMISSION LIMITATIONS AND MONITORING REQUIREMENTS**

Beginning June 12, 2001, the permittee is authorized to construct air emissions equipment for the emission of air contaminants from the IsoMax II Process, Emission Point AA-224, the 100 MMBTUH Process Heater (Reference No. F-6260).

The air emissions equipment shall be constructed to comply with the emission limitations and monitoring requirements specified below.

**EMISSION LIMITATIONS \***

|                    |   |
|--------------------|---|
| Particulate Matter | 0.409 lbs per MMBtu heat input  |
| Sulfur Dioxide     | 6.15 lbs/hr and 15.51 tons/year, as determined by EPA Test Method 6, 40 CFR 60, Appendix A. |
| Sulfuric Acid      | 0.10 lbs/hr and 0.24 tons/year, as determined by Method 8, 40 CFR 60, Appendix A.           |
| Opacity            | 40% as determined by EPA Test Method 9, 40 CFR 60, Appendix A.                              |

All test methods specified above shall be those versions, or their approved equivalents, which are in effect June 12, 2001.

\* The particulate matter emission limitation established in a previous Permit to Construct.

**FUEL RESTRICTIONS**

Fuels other than Natural Gas and Refinery Fuel Gas (RFG) are prohibited.

**MONITORING REQUIREMENTS**

The permittee shall record and maintain records of the amounts of each fuel combusted during each day.

The permittee shall collect weekly fuel samples in an as-fired condition and analyze for sulfur content.

The permittee shall install, calibrate, maintain, and operate an instrument for continuously monitoring and recording the concentration by volume (dry basis, zero percent excess air) of SO<sub>2</sub> emissions into the atmosphere. The monitor shall include an oxygen monitor for

correcting the data for excess air.

In place of the SO<sub>2</sub> monitor, an instrument for continuously monitoring and recording the concentration (dry basis) of H<sub>2</sub>S in fuel gases before being burned in a fuel gas combustion device may be used.

- (i) The span value for this instrument is 0.186 grains/dry standard cubic feet (gr/dscf) H<sub>2</sub>S.
- (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 H<sub>2</sub>S in the fuel gas being burned.
- (iii) The performance evaluations for this H<sub>2</sub>S monitor under § 60.13(c) shall use Performance Specification 7. Method 11 shall be used for conducting the relative accuracy evaluations.

**PART II**  
**EMISSION LIMITATIONS AND MONITORING REQUIREMENTS**

Beginning June 12, 2001, the permittee is authorized to construct air emissions equipment for the emission of air contaminants from the Hydrogen Plant II, Emission Point AA-231, the 730 MMBTUH Process Heater (Reference No. F-6410).

This emission point includes fuel combustion emissions generated from the 730 MMBTUH process heater and Emission Point AA-232, the Hydrogen Plant II, natural gas-fired 217 MMBTUH Gas Turbine. The emission limitations herein are applicable to the 730 MMBTUH process heater exclusively.

The air emissions equipment shall be constructed to comply with the emission limitations and monitoring requirements specified below.

**EMISSION LIMITATIONS** \*

|                            |   |
|----------------------------|---|
| Particulate Matter         | 1.94 lbs/hr and 8.49 tons/year, as determined by EPA Test Methods 1-5, 40 CFR 60, Appendix A.   |
| PM <sub>10</sub>           | 1.94 lbs/hr and 8.49 tons/year as determined by EPA Test Method 201 or 201A in conjunction with Test Method 202, 40 CFR 51, Appendix M. |
| Sulfur Dioxide             | 44.90 lbs/hr and 113.19 tons/year, as determined by EPA Test Method 6, 40 CFR 60, Appendix A.   |
| Nitrogen Oxides            | 422.8 lbs/hr and 1852 tons/year, as determined by EPA Test Method 7, 40 CFR 60, Appendix A.   |
| Carbon Monoxide            | 25.84 lbs/hr and 113.18 tons/year, as determined by EPA Test Method 10, 40 CFR 60, Appendix A.  |
| Volatile Organic Compounds | 0.90 lbs/hr and 3.96 tons/year, as determined by EPA Test Method 25, 40 CFR 60, Appendix A.   |
| Sulfuric Acid              | 0.69 lbs/hr and 1.75 tons/year, as determined by EPA Test Method 8, 40 CFR 60, Appendix A.  |
| Opacity                    | 40% as determined by EPA Test Method 9, 40 CFR 60, Appendix A.  |

All test methods specified above shall be those versions, or their approved equivalents, which are in effect June 12, 2001.

\* The particulate matter, nitrogen oxides, carbon monoxide and volatile organic

compounds emission limitation established in a previous Permit to Construct.

### **FUEL RESTRICTIONS**

Fuels other than Natural Gas and Refinery Fuel Gas (RFG) are prohibited.

### **STANDARD FOR SULFUR DIOXIDE**

The permittee shall not combust any fuel gas that contains Hydrogen Sulfide (H<sub>2</sub>S) in excess of 0.10 grains/dry standard cubic feet (gr/dscf).

### **MONITORING REQUIREMENTS**

The permittee shall record and maintain records of the amounts of each fuel combusted during each day.

The permittee shall collect weekly fuel samples in an as-fired condition and analyze for sulfur content.

The permittee shall install, calibrate, maintain, and operate an instrument for continuously monitoring and recording the concentration by volume (dry basis, zero percent excess air) of SO<sub>2</sub> emissions into the atmosphere. The monitor shall include an oxygen monitor for correcting the data for excess air.

In place of the SO<sub>2</sub> monitor, an instrument for continuously monitoring and recording the concentration (dry basis) of H<sub>2</sub>S in fuel gases before being burned in a fuel gas combustion device may be used.

- (i) The span value for this instrument is 0.186 grains/dry standard cubic feet (gr/dscf) H<sub>2</sub>S.
- (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 H<sub>2</sub>S in the fuel gas being burned.
- (iii) The performance evaluations for this H<sub>2</sub>S monitor under § 60.13(c) shall use Performance Specification 7. Method 11 shall be used for conducting the relative accuracy evaluations.

**PART II**  
**EMISSION LIMITATIONS AND MONITORING REQUIREMENTS**

Beginning [Modification Date], the permittee is authorized to construct air emissions equipment for the emission of air contaminants from the HDS II, Emission Point AA-245, the 45 MMBTUH Process Heater (Reference No. F-6531).

The air emissions equipment shall be constructed to comply with the emission limitations and monitoring requirements specified below.

**EMISSION LIMITATIONS**

|                            |   |
|----------------------------|---|
| Particulate Matter         | 0.50 lbs/hr and 1.47 tons/year, as determined by EPA Test Methods 1-5, 40 CFR 60, Appendix A.                                     |
| PM <sub>10</sub>           | 0.50 lbs/hr and 1.47 tons/year, as determined by EPA Test 201 or 201A in conjunction with Test Method 202, 40 CFR 51, Appendix M. |
| Sulfur Dioxide             | 2.77 lbs/hr and 6.98 tons/year, as determined by EPA Test Method 6, 40 CFR 60, Appendix A.  |
| Nitrogen Oxides            | 6.62 lbs/hr and 19.32 tons/year, as determined by EPA Test Method 7, 40 CFR 60, Appendix A.                                       |
| Carbon Monoxide            | 12.18 lbs/hr and 14.23 tons/year, as determined by EPA Test Method 10, 40 CFR 60, Appendix A.                                     |
| Volatile Organic Compounds | 0.36 lbs/hr and 1.06 tons/year, as determined by EPA Test Method 25, 40 CFR 60, Appendix A.                                       |
| Sulfuric Acid              | 0.04 lbs/hr and 0.11 tons/year, as determined by EPA Test Method 8, 40 CFR 60, Appendix A.  |
| Opacity                    | 40% as determined by EPA Test Method 9, 40 CFR 60, Appendix A.  |

All test methods specified above shall be those versions, or their approved equivalents, which are in effect October 11, 2005.

### **FUEL RESTRICTIONS**

Fuels other than Natural Gas and Refinery Fuel Gas (RFG) are prohibited.

### **TEST METHODS AND PROCEDURES**

Within 60 days after achieving the maximum production rate at which Emission Point AA-245 will be operated, but no later than 180 days of any physical (or operational) change to the HDS II, process heater (see Part III, Notification Requirements, item 11), the permittee shall demonstrate compliance with the particulate matter (PM/PM10), sulfur dioxide (SO<sub>2</sub>), carbon monoxide (CO), nitrogen oxide (NO<sub>x</sub>) and sulfuric acid emission limitation by stack testing as specified below and biennially thereafter.

- (1) Particulate Matter utilizing EPA Reference Methods 1 - 5
- (2) Sulfur Dioxide utilizing EPA Reference Method 6
- (3) Sulfuric Acid utilizing EPA Reference Method 8
- (4) Carbon Monoxide utilizing EPA Reference Method 10
- (5) Nitrogen Oxides utilizing EPA Reference Method 7, 7A or 7E.

For the purpose of demonstrating compliance, the permittee shall operate the emission unit at its maximum capacity.

A pretest conference at least thirty (30) days prior to the scheduled test date is needed to ensure that all test methods and procedures are acceptable to the Office of Pollution Control. Also, the Office of Pollution Control must be notified prior to the scheduled test date. At least ten (10) days notice shall be given so that an observer may be scheduled to witness the test(s).

### **MONITORING REQUIREMENTS**

The permittee shall record and maintain records of the amounts of each fuel combusted during each day.

The permittee shall collect weekly fuel samples in an as-fired condition and analyze for sulfur content.

The permittee shall install, calibrate, maintain, and operate an instrument for continuously monitoring and recording the concentration by volume (dry basis, zero percent excess air) of SO<sub>2</sub> emissions into the atmosphere. The monitor shall include an oxygen monitor for

correcting the data for excess air.

In place of the SO<sub>2</sub> monitor, an instrument for continuously monitoring and recording the concentration (dry basis) of H<sub>2</sub>S in fuel gases before being burned in a fuel gas combustion device may be used.

- (i) The span value for this instrument is 0.186 grains/dry standard cubic feet (gr/dscf) H<sub>2</sub>S.
- (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 H<sub>2</sub>S in the fuel gas being burned.
- (iii) The performance evaluations for this H<sub>2</sub>S monitor under § 60.13(c) shall use Performance Specification 7. Method 11 shall be used for conducting the relative accuracy evaluations.

**PART II**  
**EMISSION LIMITATIONS AND MONITORING REQUIREMENTS**

Beginning June 12, 2001, the permittee is authorized to construct air emissions equipment for the emission of air contaminants from the HDS II, Emission Point AA-246, the 37 MMBTUH Process Heater (Reference No. F-6532).

The air emissions equipment shall be constructed to comply with the emission limitations and monitoring requirements specified below.

**EMISSION LIMITATIONS \***

|                    |  |
|--------------------|--|
| Particulate Matter | 0.483 lbs per MMBtu heat input   |
| Sulfur Dioxide     | 2.28 lbs/hr and 5.74 tons/year, as determined by EPA Test Method 6, 40 CFR 60, Appendix A. |
| Sulfuric Acid      | 0.04 lbs/hr and 0.09 tons/year, as determined by EPA Test Method 8, 40 CFR 60, Appendix A. |
| Opacity            | 40% as determined by EPA Test Method 9, 40 CFR 60, Appendix A.                             |

All test methods specified above shall be those versions, or their approved equivalents, which are in effect June 12, 2001.

\* The particulate matter emission limitation established in a previous Permit to Construct.

**FUEL RESTRICTIONS**

Fuels other than Natural Gas and Refinery Fuel Gas (RFG) are prohibited.

**MONITORING REQUIREMENTS**

The permittee shall record and maintain records of the amounts of each fuel combusted during each day.

The permittee shall collect weekly fuel samples in an as-fired condition and analyze for sulfur content.

The permittee shall install, calibrate, maintain, and operate an instrument for continuously monitoring and recording the concentration by volume (dry basis, zero percent excess air) of SO<sub>2</sub> emissions into the atmosphere. The monitor shall include an oxygen monitor for correcting the data for excess air.

In place of the SO<sub>2</sub> monitor, an instrument for continuously monitoring and recording the

concentration (dry basis) of H<sub>2</sub>S in fuel gases before being burned in a fuel gas combustion device may be used.

- (i) The span value for this instrument is 0.186 grains/dry standard cubic feet (gr/dscf) H<sub>2</sub>S.
- (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 H<sub>2</sub>S in the fuel gas being burned.
- (iii) The performance evaluations for this H<sub>2</sub>S monitor under § 60.13(c) shall use Performance Specification 7. Method 11 shall be used for conducting the relative accuracy evaluations.

**PART II**  
**EMISSION LIMITATIONS AND MONITORING REQUIREMENTS**

Beginning June 12, 2001, the permittee is authorized to construct air emissions equipment for the emission of air contaminants from the Rheniformer II, Emission Point AA-241, comprising four (4) Process Heaters - 121 MMBTUH, 129 MMBTUH, 118 MMBTUH and 49 MMBTUH (Reference Nos. F-6550, F-6560, F-6570, & F-6580, respectively). Fuel combustion emissions generated are vented through two (2) exhaust stacks.

The air emissions equipment shall be constructed to comply with the emission limitations and monitoring requirements specified below.

**EMISSION LIMITATIONS\***

|                    |  |                            |  |
|--------------------|--|----------------------------|--|
| Particulate Matter | F-6550   | 0.396 lbs/MMBtu heat input | EPA Test Methods<br>1-5, 40 CFR 60,<br>Appendix A. |
|                    | F-6560   | 0.392 lbs/MMBtu heat input |  |
|                    | F-6570   | 0.398 lbs/MMBtu heat input |  |
|                    | F-6580   | 0.460 lbs/MMBtu heat input |  |
| Sulfur Dioxide     | 25.65 lbs/hr and 64.66 tons/year, as determined by EPA Test Method 6, 40 CFR 60, Appendix A. |                            |  |
| Sulfuric Acid      | 0.40 lbs/hr and 1.00 tons/year, as determined by EPA Test Method 8, 40 CFR 60, Appendix A.   |                            |  |
| Opacity            | 40% as determined by EPA Test Method 9, 40 CFR 60, Appendix A.                               |                            |  |

All test methods specified above shall be those versions, or their approved equivalents, which are in effect June 12, 2001.

- \* The particulate matter emission limitation established in a previous Permit to Construct.
- \* The sulfur dioxide (SO<sub>2</sub>) and sulfuric acid (H<sub>2</sub>SO<sub>4</sub>) emission limitations are the total combined SO<sub>2</sub> and H<sub>2</sub>SO<sub>4</sub> emissions for Emission Point AA-241.

### **FUEL RESTRICTIONS**

Fuels other than Natural Gas and Refinery Fuel Gas (RFG) are prohibited.

### **MONITORING REQUIREMENTS**

The permittee shall record and maintain records of the amounts of each fuel combusted during each day.

The permittee shall collect weekly fuel samples in an as-fired condition and analyze for sulfur content.

The permittee shall install, calibrate, maintain, and operate an instrument for continuously monitoring and recording the concentration by volume (dry basis, zero percent excess air) of SO<sub>2</sub> emissions into the atmosphere. The monitor shall include an oxygen monitor for correcting the data for excess air.

In place of the SO<sub>2</sub> monitor, an instrument for continuously monitoring and recording the concentration (dry basis) of H<sub>2</sub>S in fuel gases before being burned in a fuel gas combustion device may be used.

- (i) The span value for this instrument is 0.186 grains/dry standard cubic feet (gr/dscf) H<sub>2</sub>S.
- (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 H<sub>2</sub>S in the fuel gas being burned.
- (iii) The performance evaluations for this H<sub>2</sub>S monitor under § 60.13(c) shall use Performance Specification 7. Method 11 shall be used for conducting the relative accuracy evaluations.

**PART II**  
**EMISSION LIMITATIONS AND MONITORING REQUIREMENTS**

Beginning June 12, 2001, the permittee is authorized to construct air emissions equipment for the emission of air contaminants from the Ultra Low Sulfur Diesel Hydrofiner, Emission Point AA-261, the 33.8 MMBTUH Process Heater (Reference No. F-6701).

The air emissions equipment shall be constructed to comply with the emission limitations and monitoring requirements specified below.

**EMISSION LIMITATIONS \***

|                    |  |
|--------------------|--|
| Particulate Matter | 0.490 lbs per MMBtu heat input   |
| Sulfur Dioxide     | 2.08 lbs/hr and 5.24 tons/year, as determined by EPA Test Method 6, 40 CFR 60, Appendix A. |
| Sulfuric Acid      | 0.03 lbs/hr and 0.08 tons/year, as determined by EPA Test Method 8, 40 CFR 60, Appendix A. |
| Opacity            | 40% as determined by EPA Test Method 9, 40 CFR 60, Appendix A.                             |

All test methods specified above shall be those versions, or their approved equivalents, which are in effect June 12, 2001.

\* The particulate matter emission limitation established in a previous Permit to Construct.

**FUEL RESTRICTIONS**

Fuels other than Natural Gas and Refinery Fuel Gas (RFG) are prohibited.

**MONITORING REQUIREMENTS**

The permittee shall record and maintain records of the amounts of each fuel combusted during each day.

The permittee shall collect weekly fuel samples in an as-fired condition and analyze for sulfur content.

The permittee shall install, calibrate, maintain, and operate an instrument for continuously monitoring and recording the concentration by volume (dry basis, zero percent excess air) of SO<sub>2</sub> emissions into the atmosphere. The monitor shall include an oxygen monitor for

correcting the data for excess air.

In place of the SO<sub>2</sub> monitor, an instrument for continuously monitoring and recording the concentration (dry basis) of H<sub>2</sub>S in fuel gases before being burned in a fuel gas combustion device may be used.

- (i) The span value for this instrument is 0.186 grains/dry standard cubic feet (gr/dscf) H<sub>2</sub>S.
- (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 H<sub>2</sub>S in the fuel gas being burned.
- (iii) The performance evaluations for this H<sub>2</sub>S monitor under § 60.13(c) shall use Performance Specification 7. Method 11 shall be used for conducting the relative accuracy evaluations.

**PART II**  
**EMISSION LIMITATIONS AND MONITORING REQUIREMENTS**

Beginning June 12, 2001, the permittee is authorized to construct air emissions equipment for the emission of air contaminants from the Rheniformer III, Emission Point AA-271, comprising four (4) Process Heaters - 128.1 MMBTUH, 99.5 MMBTUH, 59.6 MMBTUH and a 40.8 MMBTUH (Reference Nos. F-6950, F-6960, F-6970 & F-6980, respectively). Fuel combustion emissions generated are vented through two (2) exhaust stacks.

The air emissions equipment shall be constructed to comply with the emission limitations and monitoring requirements specified below.

**EMISSION LIMITATIONS\***

|                    |        |  |   |
|--------------------|--------|--|---|
| Particulate Matter | F-6950 | 0.392 lbs/MMBtu heat input   | As determined by<br>EPA Test Methods<br>1-5, 40 CFR 60,<br>Appendix A |
|                    | F-6960 | 0.409 lbs/MMBtu heat input   |   |
|                    | F-6970 | 0.446 lbs/MMBtu heat input   |   |
|                    | F-6980 | 0.475 lbs/MMBtu heat input   |   |
| Sulfur Dioxide     |        | 20.17 lbs/hr and 50.86 tons/year, as determined by EPA Test Method 6, 40 CFR 60, Appendix A. |   |
| Sulfuric Acid      |        | 0.31 lbs/hr and 0.79 tons/year, as determined by EPA Test Method 8, 40 CFR 60, Appendix A.   |   |
| Opacity            |        | 40% as determined by EPA Test Method 9, 40 CFR 60, Appendix A.                               |   |

All test methods specified above shall be those versions, or their approved equivalents, which are in effect June 12, 2001.

- \* The particulate matter emission limitation established in a previous Permit to Construct.
- \* The sulfur dioxide (SO<sub>2</sub>) and sulfuric acid (H<sub>2</sub>SO<sub>4</sub>) emission limitations are the total combined SO<sub>2</sub> and H<sub>2</sub>SO<sub>4</sub> emissions for Emission Point AA-271.

**FUEL RESTRICTIONS**

Fuels other than Natural Gas and Refinery Fuel Gas (RFG) are prohibited.

### **MONITORING REQUIREMENTS**

The permittee shall record and maintain records of the amounts of each fuel combusted during each day.

The permittee shall collect weekly fuel samples in an as-fired condition and analyze for sulfur content.

The permittee shall install, calibrate, maintain, and operate an instrument for continuously monitoring and recording the concentration by volume (dry basis, zero percent excess air) of SO<sub>2</sub> emissions into the atmosphere. The monitor shall include an oxygen monitor for correcting the data for excess air.

In place of the SO<sub>2</sub> monitor, an instrument for continuously monitoring and recording the concentration (dry basis) of H<sub>2</sub>S in fuel gases before being burned in a fuel gas combustion device may be used.

- (i) The span value for this instrument is 0.186 grains/dry standard cubic feet (gr/dscf) H<sub>2</sub>S.
- (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 H<sub>2</sub>S in the fuel gas being burned.
- (iii) The performance evaluations for this H<sub>2</sub>S monitor under § 60.13(c) shall use Performance Specification 7. Method 11 shall be used for conducting the relative accuracy evaluations.

**PART II**  
**EMISSION LIMITATIONS AND MONITORING REQUIREMENTS**

Beginning January 6, 2003, the permittee is authorized to construct air emissions equipment for the emission of air contaminants from Emission Point AA-501, the 55 MMBTUH Hydrodenitrifier Charge Furnace (Reference No. F-8510).

The air emissions equipment shall be constructed to comply with the emission limitations and monitoring requirements specified below.

**EMISSION LIMITATIONS**

|                            |   |
|----------------------------|---|
| Particulate Matter         | 0.61 lbs/hr and 1.79 tons/year, as determined by EPA Test Methods 1-5, 40 CFR 60, Appendix A.                                     |
| PM <sub>10</sub>           | 0.61 lbs/hr and 1.79 tons/year, as determined by EPA Test 201 or 201A in conjunction with Test Method 202, 40 CFR 51, Appendix M. |
| Sulfur Dioxide             | 3.38 lbs/hr and 8.53 tons/year, as determined by EPA Test Method 6, 40 CFR 60, Appendix A.  |
| Nitrogen Oxides            | 8.09 lbs/hr and 23.62 tons/year, as determined by EPA Test Method 7, 40 CFR 60, Appendix A.                                       |
| Carbon Monoxide            | 14.89 lbs/hr and 17.39 tons/years, as determined by EPA Test Method 10, 40 CFR 60, Appendix A.                                    |
| Volatile Organic Compounds | 0.44 lbs/hr and 1.30 tons/year, as determined by EPA Test Method 25, 40 CFR 60, Appendix A.                                       |
| Sulfuric Acid              | 0.05 lbs/hr and 0.13 tons/year, as determined by EPA Test Method 8, 40 CFR 60, Appendix A.  |
| Opacity                    | 40% as determined by EPA Test Method 9, 40 CFR 60, Appendix A.  |

All test methods specified above shall be those versions, or their approved equivalents, which are in effect January 6, 2003.

**FUEL RESTRICTIONS**

Fuels other than Natural Gas and Refinery Fuel Gas (RFG) are prohibited.

**TEST METHODS AND PROCEDURES**

Within 60 days after achieving the maximum production rate at which Emission Point AA-501 will operate, but no later than 180 days of any physical (or operational) change to the hydrodenitrifier charge furnace (see Part III, Notification Requirements, item 11), the permittee shall demonstrate compliance with the particulate matter (PM/PM10), nitrogen oxides (NOX) and carbon monoxide (CO) emission limitation by stack testing as specified below and biennially thereafter.

- (1) Particulate Matter utilizing EPA Reference Methods 1 - 5
- (2) Carbon Monoxide utilizing EPA Reference Method 10
- (3) Nitrogen Oxides utilizing EPA Reference Method 7, 7A or 7E.

For the purpose of demonstrating compliance, the permittee shall operate the emission unit at its maximum capacity.

A pretest conference at least thirty (30) days prior to the scheduled test date is needed to ensure that all test methods and procedures are acceptable to the Office of Pollution Control. Also, the Office of Pollution Control must be notified prior to the scheduled test date. At least ten (10) days notice shall be given so that an observer may be scheduled to witness the test(s).

### **STANDARD FOR SULFUR DIOXIDE**

The permittee shall not combust any fuel gas that contains Hydrogen Sulfide (H<sub>2</sub>S) in excess of 0.10 grains/dry standard cubic feet (gr/dscf).

### **MONITORING REQUIREMENTS**

The permittee shall record and maintain records of the amounts of each fuel combusted during each day.

The permittee shall collect weekly fuel samples in an as-fired condition and analyze for sulfur content.

The permittee shall install, calibrate, maintain, and operate an instrument for continuously monitoring and recording the concentration by volume (dry basis, zero percent excess air) of SO<sub>2</sub> emissions into the atmosphere. The monitor shall include an oxygen monitor for correcting the data for excess air.

In place of the SO<sub>2</sub> monitor, an instrument for continuously monitoring and recording the concentration (dry basis) of H<sub>2</sub>S in fuel gases before being burned in a fuel gas combustion

device may be used.

- (i) The span value for this instrument is 0.186 grains/dry standard cubic feet (gr/dscf) H<sub>2</sub>S.
- (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 H<sub>2</sub>S in the fuel gas being burned.
- (iii) The performance evaluations for this H<sub>2</sub>S monitor under § 60.13(c) shall use Performance Specification 7. Method 11 shall be used for conducting the relative accuracy evaluations.

**PART II**  
**EMISSION LIMITATIONS AND MONITORING REQUIREMENTS**

Beginning January 6, 2003, the permittee is authorized to construct air emissions equipment for the emission of air contaminants from Emission Point AA-502, the 150 MMBTUH Hydrodenitrifier Distillation Furnace (Reference No. F-8560).

The air emissions equipment shall be constructed to comply with the emission limitations and monitoring requirements specified below.

**EMISSION LIMITATIONS** \*

|                    |   |
|--------------------|---|
| Particulate Matter | 0.005 lbs per MMBtu heat input  |
| Sulfur Dioxide     | 9.22 lbs/hr and 23.27 tons/year, as determined by EPA Test Method 6, 40 CFR 60, Appendix A. |
| Nitrogen Oxides    | 125 ppmv in stack gas, at 3 percent oxygen and on a dry basis                               |
| Sulfuric Acid      | 0.14 lbs/hr and 0.36 tons/year, as determined by EPA Test Method 8, 40 CFR 60, Appendix A.  |
| Opacity            | 40% as determined by EPA Test Method 9, 40 CFR 60, Appendix A.                              |

All test methods specified above shall be those versions, or their approved equivalents, which are in effect January 6, 2003.

\* The particulate matter and nitrogen oxide emissions were established in a Permit to Construct issued November 24, 1999.

**FUEL RESTRICTIONS**

Fuels other than Natural Gas and Refinery Fuel Gas (RFG) are prohibited.

**STANDARD FOR SULFUR DIOXIDE**

The permittee shall not combust any fuel gas that contains Hydrogen Sulfide (H<sub>2</sub>S) in excess of 0.10 grains/dry standard cubic feet (gr/dscf).

**TEST METHODS AND PROCEDURES**

Within 60 days after achieving the maximum production rate at which Emission Point AA-502 will be operated, but no later than 180 days of any physical (or operational) change to the hydrodenitrifier distillation furnace (see Part III, Notification Requirements, item 11), the permittee shall demonstrate compliance with the sulfur dioxide (SO<sub>2</sub>) and sulfuric acid emission limitation by stack testing as specified below and biennially thereafter.

- (1) Sulfur Dioxide utilizing EPA Reference Method 6
- (2) Sulfuric Acid utilizing EPA Reference Method 8

For the purpose of demonstrating compliance, the permittee shall operate the emission unit at its maximum capacity.

A pretest conference at least thirty (30) days prior to the scheduled test date is needed to ensure that all test methods and procedures are acceptable to the Office of Pollution Control. Also, the Office of Pollution Control must be notified prior to the scheduled test date. At least ten (10) days notice shall be given so that an observer may be scheduled to witness the test(s).

### **MONITORING REQUIREMENTS**

The permittee shall record and maintain records of the amounts of each fuel combusted during each day.

The permittee shall collect weekly fuel samples in an as-fired condition and analyze for sulfur content.

The permittee shall install, calibrate, maintain, and operate an instrument for continuously monitoring and recording the concentration by volume (dry basis, zero percent excess air) of SO<sub>2</sub> emissions into the atmosphere. The monitor shall include an oxygen monitor for correcting the data for excess air.

In place of the SO<sub>2</sub> monitor, an instrument for continuously monitoring and recording the concentration (dry basis) of H<sub>2</sub>S in fuel gases before being burned in a fuel gas combustion device may be used.

- (i) The span value for this instrument is 0.186 grains/dry standard cubic feet (gr/dscf) H<sub>2</sub>S.
- (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 H<sub>2</sub>S in the fuel gas being burned.
- (iii) The performance evaluations for this H<sub>2</sub>S monitor under § 60.13(c) shall use

Performance Specification 7. Method 11 shall be used for conducting the relative accuracy evaluations.

**PART II**  
**EMISSION LIMITATIONS AND MONITORING REQUIREMENTS**

Beginning June 12, 2001, the permittee is authorized to construct air emissions equipment for the emission of air contaminants from Emission Point AA-511, the Residuum Desulfurization (RDS) 65 MMBTUH Feed Furnace No. 1 (Reference No. F-8110).

The air emissions equipment shall be constructed to comply with the emission limitations and monitoring requirements specified below.

**EMISSION LIMITATIONS** \*

|                    |   |
|--------------------|---|
| Particulate Matter | 0.005 lbs per MMBtu heat input  |
| Sulfur Dioxide     | 4.00 lbs/hr and 10.08 tons/year, as determined by EPA Test Method 6, 40 CFR 60, Appendix A. |
| Nitrogen Oxides    | 125 ppmv in the stack gas, at 3 percent oxygen and on a dry basis.                          |
| Sulfuric Acid      | 0.06 lbs/hr and 0.16 tons/year, as determined by EPA Test Method 8, 40 CFR 60, Appendix A.  |
| Opacity            | 40% as determined by EPA Test Method 9, 40 CFR 60, Appendix A.                              |

All test methods specified above shall be those versions, or their approved equivalents, which are in effect June 12, 2001.

\* The particulate matter and nitrogen oxide emissions were established in a Permit to Construct issued November 24, 1999.

**FUEL RESTRICTIONS**

Fuels other than Natural Gas and Refinery Fuel Gas (RFG) are prohibited.

**STANDARDS FOR SULFUR DIOXIDE**

The permittee shall not combust any fuel gas that contains Hydrogen Sulfide (H<sub>2</sub>S) in excess of 0.10 grains/dry standard cubic feet (gr/dscf).

**MONITORING REQUIREMENTS**

The permittee shall record and maintain records of the amounts of each fuel combusted during each day.

The permittee shall collect weekly fuel samples in an as-fired condition and analyze for sulfur content.

The permittee shall install, calibrate, maintain, and operate an instrument for continuously monitoring and recording the concentration by volume (dry basis, zero percent excess air) of SO<sub>2</sub> emissions into the atmosphere. The monitor shall include an oxygen monitor for correcting the data for excess air.

In place of the SO<sub>2</sub> monitor, an instrument for continuously monitoring and recording the concentration (dry basis) of H<sub>2</sub>S in fuel gases before being burned in a fuel gas combustion device may be used.

- (i) The span value for this instrument is 0.186 grains/dry standard cubic feet (gr/dscf) H<sub>2</sub>S.
- (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 H<sub>2</sub>S in the fuel gas being burned.
- (iii) The performance evaluations for this H<sub>2</sub>S monitor under § 60.13(c) shall use Performance Specification 7. Method 11 shall be used for conducting the relative accuracy evaluations.

**PART II**  
**EMISSION LIMITATIONS AND MONITORING REQUIREMENTS**

Beginning June 12, 2001, the permittee is authorized to construct air emissions equipment for the emission of air contaminants from Emission Point AA-512, the Residuum Desulfurization (RDS) 65 MMBTUH Feed Furnace No. 2 (Reference No. F-8120).

The air emissions equipment shall be constructed to comply with the emission limitations and monitoring requirements specified below.

**EMISSION LIMITATIONS \***

|                    |   |
|--------------------|---|
| Particulate Matter | 0.005 lbs per MMBtu heat input  |
| Sulfur Dioxide     | 4.00 lbs/hr and 10.08 tons/year, as determined by EPA Test Method 6, 40 CFR 60, Appendix A. |
| Nitrogen Oxides    | 125 ppmv in stack gas, at 3 percent oxygen and on a dry basis.                              |
| Sulfuric Acid      | 0.06 lbs/hr and 0.16 tons/year, as determined by EPA Test Method 8, 40 CFR 60, Appendix A.  |
| Opacity            | 40% as determined by EPA Test Method 9, 40 CFR 60, Appendix A.                              |

All test methods specified above shall be those versions, or their approved equivalents, which are in effect June 12, 2001.

\* The particulate matter and nitrogen oxide emissions were established in a Permit to Construct issued November 24, 1999.

**FUEL RESTRICTIONS**

Fuels other than Natural Gas and Refinery Fuel Gas (RFG) are prohibited.

**STANDARD FOR SULFUR DIOXIDE**

The permittee shall not combust any fuel gas that contains Hydrogen Sulfide (H<sub>2</sub>S) in excess of 0.10 grains/dry standard cubic feet (gr/dscf).

**MONITORING REQUIREMENTS**

The permittee shall record and maintain records of the amounts of each fuel combusted during each day.

The permittee shall collect weekly fuel samples in an as-fired condition and analyze for sulfur content.

The permittee shall install, calibrate, maintain, and operate an instrument for continuously monitoring and recording the concentration by volume (dry basis, zero percent excess air) of SO<sub>2</sub> emissions into the atmosphere. The monitor shall include an oxygen monitor for correcting the data for excess air.

In place of the SO<sub>2</sub> monitor, an instrument for continuously monitoring and recording the concentration (dry basis) of H<sub>2</sub>S in fuel gases before being burned in a fuel gas combustion device may be used.

- (i) The span value for this instrument is 0.186 grains/dry standard cubic feet (gr/dscf) H<sub>2</sub>S.
- (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 H<sub>2</sub>S in the fuel gas being burned.
- (iii) The performance evaluations for this H<sub>2</sub>S monitor under § 60.13(c) shall use Performance Specification 7. Method 11 shall be used for conducting the relative accuracy evaluations.

**PART II**  
**EMISSION LIMITATIONS AND MONITORING REQUIREMENTS**

Beginning June 12, 2001, the permittee is authorized to construct air emissions equipment for the emission of air contaminants from Emission Point AA-513, the Residuum Desulfurization (RDS) 65 MMBTUH Feed Furnace No. 3 (Reference No. F-8130).

The air emissions equipment shall be constructed to comply with the emission limitations and monitoring requirements specified below.

**EMISSION LIMITATIONS \***

|                    |   |
|--------------------|---|
| Particulate Matter | 0.005 lbs per MMBtu   |
| Sulfur Dioxide     | 4.00 lbs/hr and 10.08 tons/year, as determined by EPA Test Method 6, 40 CFR 60, Appendix A. |
| Nitrogen Oxides    | 125 ppmv in stack gas, at 3 percent oxygen and on a dry basis.                              |
| Sulfuric Acid      | 0.06 lbs/hr and 0.16 tons/year, as determined by EPA Test Method 8, 40 CFR 60, Appendix A.  |
| Opacity            | 40% as determined by EPA Test Method 9, 40 CFR 60, Appendix A.                              |

All test methods specified above shall be those versions, or their approved equivalents, which are in effect June 12, 2001.

\* The particulate matter and nitrogen oxide emissions were established in a Permit to Construct issued November 24, 1999.

**FUEL RESTRICTIONS**

Fuels other than Natural Gas and Refinery Fuel Gas (RFG) are prohibited.

**STANDARD FOR SULFUR DIOXIDE**

The permittee shall not combust any fuel gas that contains Hydrogen Sulfide (H<sub>2</sub>S) in excess of 0.10 grains/dry standard cubic feet (gr/dscf).

**MONITORING REQUIREMENTS**

The permittee shall record and maintain records of the amounts of each fuel combusted during each day.

The permittee shall collect weekly fuel samples in an as-fired condition and analyze for sulfur content.

The permittee shall install, calibrate, maintain, and operate an instrument for continuously monitoring and recording the concentration by volume (dry basis, zero percent excess air) of SO<sub>2</sub> emissions into the atmosphere. The monitor shall include an oxygen monitor for correcting the data for excess air.

In place of the SO<sub>2</sub> monitor, an instrument for continuously monitoring and recording the concentration (dry basis) of H<sub>2</sub>S in fuel gases before being burned in a fuel gas combustion device may be used.

- (i) The span value for this instrument is 0.186 grains/dry standard cubic feet (gr/dscf) H<sub>2</sub>S.
- (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 H<sub>2</sub>S in the fuel gas being burned.
- (iii) The performance evaluations for this H<sub>2</sub>S monitor under § 60.13(c) shall use Performance Specification 7. Method 11 shall be used for conducting the relative accuracy evaluations.

**PART II**  
**EMISSION LIMITATIONS AND MONITORING REQUIREMENTS**

Beginning January 6, 2003, the permittee is authorized to construct air emissions equipment for the emission of air contaminants from the Coker Furnace Unit No.1, Emission Point AA-521, the 203.5 MMBTUH Process Heater (Reference No. F-8300A).

The air emissions equipment shall be constructed to comply with the emission limitations and monitoring requirements specified below.

**EMISSION LIMITATIONS**

|                            |   |
|----------------------------|---|
| Particulate Matter         | 2.27 lbs/hr and 6.64 tons/year, as determined by EPA Test Methods 1-5, 40 CFR 60, Appendix A.   |
| PM <sub>10</sub>           | 2.27 lbs/hr and 6.64 tons/year as determined by EPA Test Method 201 or 201A in conjunction with Test Method 202, 40 CFR 51, Appendix M. |
| Sulfur Dioxide             | 12.51 lbs/hr and 31.58 tons/year, as determined by EPA Test Method 6, 40 CFR 60, Appendix A.  |
| Nitrogen Oxides            | 29.93 lbs/hr and 87.40 tons/year, as determined by EPA Test Method 7, 40 CFR 60, Appendix A.  |
| Carbon Monoxide            | 55.10 lbs/hr and 64.36 tons/year, as determined by EPA Test Method 10, 40 CFR 60, Appendix A.   |
| Volatile Organic Compounds | 1.65 lbs/hr and 4.81 tons/year, as determined by EPA Test Method 25, 40 CFR 60, Appendix A.   |
| Sulfuric Acid              | 0.19 lbs/hr and 0.49 tons/year, as determined by EPA Test Method 8, 40 CFR 60, Appendix A.  |
| Opacity                    | 40% as determined by EPA Test Method 9, 40 CFR 60, Appendix A.  |

All test methods specified above shall be those versions, or their approved equivalents, which are in effect January 6, 2003.

### **FUEL RESTRICTIONS**

Fuels other than Natural Gas and Refinery Fuel Gas (RFG) are prohibited.

### **TEST METHODS AND PROCEDURES**

Within 60 days after achieving the maximum production rate at which Emission Point AA-521 will be operated, but no later than 180 days of any physical (or operational) change to the Coker Furnace Unit No. 1, process heater (see Part III, Notification Requirements, item 11), the permittee shall demonstrate compliance with the particulate matter (PM/PM10), sulfur dioxide, nitrogen oxides (NOX), carbon monoxide (CO) and sulfuric acid emission limitation by stack testing as specified below and biennially thereafter.

- (1) Particulate Matter utilizing EPA Reference Methods 1 - 5
- (2) Sulfur Dioxide utilizing EPA Reference Method 6
- (3) Sulfuric Acid utilizing EPA Reference Method 8
- (4) Carbon Monoxide utilizing EPA Reference Method 10
- (5) Nitrogen Oxides utilizing EPA Reference Method 7, 7A or 7E.

For the purpose of demonstrating compliance, the permittee shall operate the emission unit at its maximum capacity.

A pretest conference at least thirty (30) days prior to the scheduled test date is needed to ensure that all test methods and procedures are acceptable to the Office of Pollution Control. Also, the Office of Pollution Control must be notified prior to the scheduled test date. At least ten (10) days notice shall be given so that an observer may be scheduled to witness the test(s).

### **STANDARD FOR SULFUR DIOXIDE**

The permittee shall not combust any fuel gas that contains Hydrogen Sulfide (H<sub>2</sub>S) in excess of 0.10 grains/dry standard cubic feet (gr/dscf).

### **MONITORING REQUIREMENTS**

The permittee shall record and maintain records of the amounts of each fuel combusted during each day.

The permittee shall collect weekly fuel samples in an as-fired condition and analyze for sulfur content.

The permittee shall install, calibrate, maintain, and operate an instrument for continuously monitoring and recording the concentration by volume (dry basis, zero percent excess air) of SO<sub>2</sub> emissions into the atmosphere. The monitor shall include an oxygen monitor for correcting the data for excess air.

In place of the SO<sub>2</sub> monitor, an instrument for continuously monitoring and recording the concentration (dry basis) of H<sub>2</sub>S in fuel gases before being burned in a fuel gas combustion device may be used.

- (i) The span value for this instrument is 0.186 grains/dry standard cubic feet (gr/dscf) H<sub>2</sub>S.
- (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 H<sub>2</sub>S in the fuel gas being burned.
- (iii) The performance evaluations for this H<sub>2</sub>S monitor under § 60.13(c) shall use Performance Specification 7. Method 11 shall be used for conducting the relative accuracy evaluations.

**PART II**  
**EMISSION LIMITATIONS AND MONITORING REQUIREMENTS**

Beginning January 6, 2003, the permittee is authorized to construct air emissions equipment for the emission of air contaminants from the Coker Furnace Unit No.2, Emission Point AA-522, the 203.5 MMBTUH Process Heater (Reference No. F-8300B).

The air emissions equipment shall be constructed to comply with the emission limitations and monitoring requirements specified below.

**EMISSION LIMITATIONS**

|                            |   |
|----------------------------|---|
| Particulate Matter         | 2.27 lbs/hr and 6.64 tons/year, as determined by EPA Test Methods 1-5, 40 CFR 60, Appendix A.   |
| PM <sub>10</sub>           | 2.27 lbs/hr and 6.64 tons/year as determined by EPA Test Method 201 or 201A in conjunction with Test Method 202, 40 CFR 51, Appendix M. |
| Sulfur Dioxide             | 12.51 lbs/hr and 31.58 tons/year, as determined by EPA Test Method 6, 40 CFR 60, Appendix A.  |
| Nitrogen Oxides            | 29.93 lbs/hr and 87.40 tons/year, as determined by EPA Test Method 7, 40 CFR 60, Appendix A.  |
| Carbon Monoxide            | 55.10 lbs/hr and 64.36 tons/year, as determined by EPA Test Method 10, 40 CFR 60, Appendix A.   |
| Volatile Organic Compounds | 1.65 lbs/hr and 4.81 tons/year, as determined by EPA Test Method 25, 40 CFR 60, Appendix A.   |
| Sulfuric Acid              | 0.19 lbs/hr and 0.49 tons/year, as determined by EPA Test Method 8, 40 CFR 60, Appendix A.  |
| Opacity                    | 40% as determined by EPA Test Method 9, 40 CFR 60, Appendix A.  |

All test methods specified above shall be those versions, or their approved equivalents, which are in effect January 6, 2003.

### **FUEL RESTRICTIONS**

Fuels other than Natural Gas and Refinery Fuel Gas (RFG) are prohibited.

### **TEST METHODS AND PROCEDURES**

Within 60 days after achieving the maximum production rate at which Emission Point AA-522 will be operated, but no later than 180 days of any physical (or operational) change to the Coker Furnace Unit No.2, process heater (see Part III, Notification Requirements, item 11), the permittee shall demonstrate compliance with the particulate matter (PM/PM10), sulfur dioxide, nitrogen oxides (NOX), carbon monoxide (CO) and sulfuric acid emission limitation by stack testing as specified below and biennially thereafter.

- (1) Particulate Matter utilizing EPA Reference Methods 1 - 5
- (2) Sulfur Dioxide utilizing EPA Reference Method 6
- (3) Sulfuric Acid utilizing EPA Reference Method 8
- (4) Carbon Monoxide utilizing EPA Reference Method 10
- (5) Nitrogen Oxides utilizing EPA Reference Method 7, 7A or 7E.

For the purpose of demonstrating compliance, the permittee shall operate the emission unit at its maximum capacity.

A pretest conference at least thirty (30) days prior to the scheduled test date is needed to ensure that all test methods and procedures are acceptable to the Office of Pollution Control. Also, the Office of Pollution Control must be notified prior to the scheduled test date. At least ten (10) days notice shall be given so that an observer may be scheduled to witness the test(s).

### **STANDARD FOR SULFUR DIOXIDE**

The permittee shall not combust any fuel gas that contains Hydrogen Sulfide (H<sub>2</sub>S) in excess of 0.10 grains/dry standard cubic feet (gr/dscf).

**MONITORING REQUIREMENTS**

The permittee shall record and maintain records of the amounts of each fuel combusted during each day.

The permittee shall collect weekly fuel samples in an as-fired condition and analyze for sulfur content.

The permittee shall install, calibrate, maintain, and operate an instrument for continuously monitoring and recording the concentration by volume (dry basis, zero percent excess air) of SO<sub>2</sub> emissions into the atmosphere. The monitor shall include an oxygen monitor for correcting the data for excess air.

In place of the SO<sub>2</sub> monitor, an instrument for continuously monitoring and recording the concentration (dry basis) of H<sub>2</sub>S in fuel gases before being burned in a fuel gas combustion device may be used.

- (i) The span value for this instrument is 0.186 grains/dry standard cubic feet (gr/dscf) H<sub>2</sub>S.
- (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 H<sub>2</sub>S in the fuel gas being burned.
- (iii) The performance evaluations for this H<sub>2</sub>S monitor under § 60.13(c) shall use Performance Specification 7. Method 11 shall be used for conducting the relative accuracy evaluations.

**PART II**  
**EMISSION LIMITATIONS AND MONITORING REQUIREMENTS**

Beginning January 6, 2003, the permittee is authorized to construct air emissions equipment for the emission of air contaminants from the Coker Furnace Unit No.3, Emission Point AA-523, the 203.5 MMBTUH Process Heater (Reference No. F-8300C).

The air emissions equipment shall be constructed to comply with the emission limitations and monitoring requirements specified below.

**EMISSION LIMITATIONS**

|                            |   |
|----------------------------|---|
| Particulate Matter         | 2.27 lbs/hr and 6.64 tons/year, as determined by EPA Test Methods 1-5, 40 CFR 60, Appendix A.   |
| PM <sub>10</sub>           | 2.27 lbs/hr and 6.64 tons/year as determined by EPA Test Method 201 or 201A in conjunction with Test Method 202, 40 CFR 51, Appendix M. |
| Sulfur Dioxide             | 12.51 lbs/hr and 31.58 tons/year, as determined by EPA Test Method 6, 40 CFR 60, Appendix A.  |
| Nitrogen Oxides            | 29.93 lbs/hr and 87.40 tons/year, as determined by EPA Test Method 7, 40 CFR 60, Appendix A.  |
| Carbon Monoxide            | 55.10 lbs/hr and 64.36 tons/year, as determined by EPA Test Method 10, 40 CFR 60, Appendix A.   |
| Volatile Organic Compounds | 1.65 lbs/hr and 4.81 tons/year, as determined by EPA Test Method 25, 40 CFR 60, Appendix A.   |
| Sulfuric Acid              | 0.19 lbs/hr and 0.49 tons/year, as determined by EPA Test Method 8, 40 CFR 60, Appendix A.  |
| Opacity                    | 40% as determined by EPA Test Method 9, 40 CFR 60, Appendix A.  |

All test methods specified above shall be those versions, or their approved equivalents, which are in effect January 6, 2003.

### **FUEL RESTRICTIONS**

Fuels other than Natural Gas and Refinery Fuel Gas (RFG) are prohibited.

### **TEST METHODS AND PROCEDURES**

Within 60 days after achieving the maximum production rate at which Emission Point AA-523 will be operated, but no later than 180 days of any physical (or operational) change to the Coker Furnace Unit No. 3, process heater (see Part III, Notification Requirements, item 11), the permittee shall demonstrate compliance with the particulate matter (PM/PM10), sulfur dioxide, nitrogen oxides (NOX), carbon monoxide (CO) and sulfuric acid emission limitation by stack testing as specified below and biennially thereafter.

- (1) Particulate Matter utilizing EPA Reference Methods 1 - 5
- (2) Sulfur Dioxide utilizing EPA Reference Method 6
- (3) Sulfuric Acid utilizing EPA Reference Method 8
- (4) Carbon Monoxide utilizing EPA Reference Method 10
- (5) Nitrogen Oxides utilizing EPA Reference Method 7, 7A or 7E.

For the purpose of demonstrating compliance, the permittee shall operate the emission unit at its maximum capacity.

A pretest conference at least thirty (30) days prior to the scheduled test date is needed to ensure that all test methods and procedures are acceptable to the Office of Pollution Control. Also, the Office of Pollution Control must be notified prior to the scheduled test date. At least ten (10) days notice shall be given so that an observer may be scheduled to witness the test(s).

### **STANDARD FOR SULFUR DIOXIDE**

The permittee shall not combust any fuel gas that contains Hydrogen Sulfide (H<sub>2</sub>S) in excess of 0.10 grains/dry standard cubic feet (gr/dscf).

**MONITORING REQUIREMENTS**

The permittee shall record and maintain records of the amounts of each fuel combusted during each day.

The permittee shall collect weekly fuel samples in an as-fired condition and analyze for sulfur content.

The permittee shall install, calibrate, maintain, and operate an instrument for continuously monitoring and recording the concentration by volume (dry basis, zero percent excess air) of SO<sub>2</sub> emissions into the atmosphere. The monitor shall include an oxygen monitor for correcting the data for excess air.

In place of the SO<sub>2</sub> monitor, an instrument for continuously monitoring and recording the concentration (dry basis) of H<sub>2</sub>S in fuel gases before being burned in a fuel gas combustion device may be used.

- (i) The span value for this instrument is 0.186 grains/dry standard cubic feet (gr/dscf) H<sub>2</sub>S.
- (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 H<sub>2</sub>S in the fuel gas being burned.
- (iii) The performance evaluations for this H<sub>2</sub>S monitor under § 60.13(c) shall use Performance Specification 7. Method 11 shall be used for conducting the relative accuracy evaluations.

**PART II**  
**EMISSION LIMITATIONS AND MONITORING REQUIREMENTS**

Beginning January 6, 2003, the permittee is authorized to construct air emissions equipment for the emission of air contaminants from Emission Point AA-531, the 275 MMBTUH Vacuum Distillation Feed Furnace (Reference No. F-8400).

The air emissions equipment shall be constructed to comply with the emission limitations and monitoring requirements specified below.

**EMISSION LIMITATIONS**

|                            |   |
|----------------------------|---|
| Particulate Matter         | 3.07 lbs/hr and 8.97 tons/year, as determined by EPA Test Methods 1-5, 40 CFR 60, Appendix A.   |
| PM <sub>10</sub>           | 3.07 lbs/hr and 8.97 tons/year as determined by EPA Test Method 201 or 201A in conjunction with Test Method 202, 40 CFR 51, Appendix M. |
| Sulfur Dioxide             | 16.90 lbs/hr and 42.66 tons/year, as determined by EPA Test Method 6, 40 CFR 60, Appendix A.  |
| Nitrogen Oxides            | 40.44 lbs/hr and 118.09 tons/year, as determined by EPA Test Method 7, 40 CFR 60, Appendix A.   |
| Carbon Monoxide            | 74.44 lbs/hr and 86.95 tons/year, as determined by EPA Test Method 10, 40 CFR 60, Appendix A.   |
| Volatile Organic Compounds | 2.22 lbs/hr and 6.49 tons/year, as determined by EPA Test Method 25, 40 CFR 60, Appendix A.   |
| Sulfuric Acid              | 0.26 lbs/hr and 0.66 tons/year, as determined by EPA Test Method 8, 40 CFR 60, Appendix A.  |
| Opacity                    | 40% as determined by EPA Test Method 9, 40 CFR 60, Appendix A.  |

All test methods specified above shall be those versions, or their approved equivalents, which are in effect January 6, 2003.

### **FUEL RESTRICTIONS**

Fuels other than Natural Gas and Refinery Fuel Gas (RFG) are prohibited.

### **TEST METHODS AND PROCEDURES**

Within 60 days after achieving the maximum production rate at which Emission Point AA-531 will be operated, but no later than 180 days of any physical (or operational) change to the vacuum distillation feed furnace (see Part III, Notification Requirements, item 11), the permittee shall demonstrate compliance with the particulate matter (PM/PM10), sulfur dioxide, nitrogen oxides (NOX), carbon monoxide (CO) and sulfuric acid emission limitation by stack testing as specified below and biennially thereafter.

- (1) Particulate Matter utilizing EPA Reference Methods 1 - 5
- (2) Sulfur Dioxide utilizing EPA Reference Method 6
- (3) Sulfuric Acid utilizing EPA Reference Method 8
- (4) Carbon Monoxide utilizing EPA Reference Method 10
- (5) Nitrogen Oxides utilizing EPA Reference Method 7, 7A or 7E.

For the purpose of demonstrating compliance, the permittee shall operate the emission unit at its maximum capacity.

A pretest conference at least thirty (30) days prior to the scheduled test date is needed to ensure that all test methods and procedures are acceptable to the Office of Pollution Control. Also, the Office of Pollution Control must be notified prior to the scheduled test date. At least ten (10) days notice shall be given so that an observer may be scheduled to witness the test(s).

### **STANDARD FOR SULFUR DIOXIDE**

The permittee shall not combust any fuel gas that contains Hydrogen Sulfide (H<sub>2</sub>S) in excess of 0.10 grains/dry standard cubic feet (gr/dscf).

**MONITORING REQUIREMENTS**

The permittee shall record and maintain records of the amounts of each fuel combusted during each day.

The permittee shall collect weekly fuel samples in an as-fired condition and analyze for sulfur content.

The permittee shall install, calibrate, maintain, and operate an instrument for continuously monitoring and recording the concentration by volume (dry basis, zero percent excess air) of SO<sub>2</sub> emissions into the atmosphere. The monitor shall include an oxygen monitor for correcting the data for excess air.

In place of the SO<sub>2</sub> monitor, an instrument for continuously monitoring and recording the concentration (dry basis) of H<sub>2</sub>S in fuel gases before being burned in a fuel gas combustion device may be used.

- (i) The span value for this instrument is 0.186 grains/dry standard cubic feet (gr/dscf) H<sub>2</sub>S.
- (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 H<sub>2</sub>S in the fuel gas being burned.
- (iii) The performance evaluations for this H<sub>2</sub>S monitor under § 60.13(c) shall use Performance Specification 7. Method 11 shall be used for conducting the relative accuracy evaluations.

**PART II**  
**EMISSION LIMITATIONS AND MONITORING REQUIREMENTS**

Beginning October 11, 2005, the permittee is authorized to construct air emissions equipment for the emission of air contaminants from the Hydrogen Plant III (Plant 86), Emission Point BT-541 (formerly AA-541(A) and AA-541(B)), the 780 MMBTUH Process Heater (Reference No. F-8620) and the 270 MMBTUH Gas Turbine (Reference No. KGT-8650). Fuel combustion emissions generated are vented through three (3) furnace exhaust stacks and the turbine stack vents.

This emission point is comprised of fuel combustion emissions generated from the Process Heater (F-8620) and the Gas Turbine (KGT-8650). The emission limitations specified below are applicable to the emissions from both sources.

The 270 MMBTUH Gas Turbine (KGT-8650) is subject to and shall comply with the new Source Performance Standards (NSPS), as described in 40 CFR 60, Subpart A - General Provisions and the specific requirements outlined in 40 CFR 60, Subpart GG - Standards of Performance for Stationary Gas Turbine. The specific requirements below may not encompass all the applicable requirements set forth in 40 CFR 60, Subparts A and GG.

The air emissions equipment shall be constructed to comply with the emission limitations and monitoring requirements specified below.

**EMISSION LIMITATIONS**

|                    |  |
|--------------------|--|
| Particulate Matter | 11.61 lbs/hr and 33.91 tons/year, as determined by EPA Test Methods 1-5, 40 CFR 60, Appendix A.  |
| PM <sub>10</sub>   | 11.61 lbs/hr and 33.91 tons/year, as determined by EPA Test Method 201 or 201A in conjunction with Test Method 202, 40 CFR 51, Appendix M. |
| Sulfur Dioxide     | 49.32 lbs/hr and 125.02 tons/year, as determined by EPA Test Method 6, 40 CFR 60, Appendix A.  |
| Nitrogen Oxides    | 185.94 lbs/hr and 542.93 tons/year, as determined by EPA Test Method 7, 40 CFR 60, Appendix A.   |
| Carbon Monoxide    | 270.26 lbs/hr and 305.86 tons/year, as determined by EPA Test Method 10, 40 CFR 60, Appendix A.  |
| Sulfuric Acid      | 0.74 lbs/hr and 1.87 tons/year, as determined by EPA Test Method 8, 40 CFR 60, Appendix A.   |

Opacity 40% as determined by EPA Test Method 9, 40 CFR 60, Appendix A.

All test methods specified above shall be those versions, or their approved equivalents, which are in effect October 11, 2005.

### **OPERATIONAL RESTRICTION**

No more than 35% by volume of the exhaust flow generated by Gas Turbine KGT-8650 may be vented to the atmosphere on a 12-month rolling average basis. The remaining exhaust shall be vented to Process Heater F-8620 for combustion before being vented to the atmosphere.

### **FUEL RESTRICTIONS FOR F-8620**

Fuels other than Natural Gas and Refinery Fuel Gas (RFG) are prohibited.

### **TEST METHODS AND PROCEDURES**

By April 11, 2006, the permittee shall demonstrate compliance with the emission limitations for the following pollutants by stack testing as specified below:

- (1) Particulate Matter utilizing EPA Reference Methods 1 - 5
- (2) Sulfur Dioxide utilizing EPA Reference Method 6
- (3) Carbon Monoxide utilizing EPA Reference Method 10
- (4) Nitrogen Oxides utilizing EPA Reference Method 7, 7A or 7E.
- (5) Opacity utilizing EPA Reference Method 9 (6-minute average of 24 observations)

For the purpose of demonstrating compliance, the permittee shall operate the process heater and gas turbine simultaneously at or as close to their maximum capacities as conditions allow.

A pretest conference at least thirty (30) days prior to the scheduled test date is needed to ensure that all test methods and procedures are acceptable to the Office of Pollution Control. Also, the Office of Pollution Control must be notified prior to the scheduled test date. At least ten (10) days notice shall be given so that an observer may be scheduled to witness the test(s).

### **STANDARD FOR SULFUR DIOXIDE**

For Process Heater F-8620, the permittee shall not combust any fuel gas that contains Hydrogen Sulfide (H<sub>2</sub>S) in excess of 0.10 grains/dry standard cubic feet (gr/dscf).

For Gas Turbine KGT-8650, the permittee shall not burn any fuel which contains sulfur in excess of 0.8 percent by weight. (§ 60.333(b))

### **MONITORING REQUIREMENTS FOR PROCESS HEATER F-8620**

The permittee shall record and maintain records of the amounts of each fuel combusted during each day.

The permittee shall collect weekly fuel samples in an as-fired condition and analyze for sulfur content.

The permittee shall install, calibrate, maintain, and operate an instrument for continuously monitoring and recording the concentration by volume (dry basis, zero percent excess air) of SO<sub>2</sub> emissions into the atmosphere. The monitor shall include an oxygen monitor for correcting the data for excess air.

In place of the SO<sub>2</sub> monitor, an instrument for continuously monitoring and recording the concentration (dry basis) of H<sub>2</sub>S in fuel gases before being burned in a fuel gas combustion device may be used.

- (i) The span value for this instrument is 0.186 grains/dry standard cubic feet (gr/dscf) H<sub>2</sub>S.
- (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 H<sub>2</sub>S in the fuel gas being burned.
- (iii) The performance evaluations for this H<sub>2</sub>S monitor under § 60.13(c) shall use Performance Specification 7. Method 11 shall be used for conducting the relative accuracy evaluations.

### **MONITORING, RECORDKEEPING, AND REPORTING REQUIREMENTS FOR GAS TURBINE KGT-8650**

The permittee shall monitor sulfur content of the fuel being fired in the turbine in

accordance with § 60.334(h). The frequency of determination of these values shall be as described in § 60.334(i).

The permittee may develop custom schedules for determination of the values based on the design and operation of the affected facility and the characteristics of the fuel supply. These custom schedules shall be substantiated with data and must be approved by the Mississippi Department of Environmental Quality (MDEQ) - Office of Pollution Control and the U.S. Environmental Protection Agency (EPA), Region IV, before they can be used to comply with § 60.334(h).

Within [180 days of issuance of the modified permit], the permittee shall develop and submit a plan for approval to the MDEQ for monitoring the percent exhaust flow from Gas Turbine KGT-8650 that is vented to the atmosphere. The plan shall contain, at a minimum, the following information:

- (i) The specific operating parameter(s) to be monitored (e.g. damper valve position).
- (ii) The relationship between the monitored parameter(s) and the gas turbine exhaust flow vented to the atmosphere.
- (iii) All measurement techniques used and sampling locations, if relevant.
- (iv) The basis for all calculations performed or equations derived relating the parameter(s) to the gas turbine exhaust flow.

If the plan is approved, the permittee shall maintain records of those instances when gas turbine exhaust is vented to the atmosphere and the percent gas turbine exhaust vented to the atmosphere. The permittee shall report any instances when the gas turbine exhaust vented to the atmosphere exceeds 35% on a 12-month rolling average basis in the semiannual report required by Part III, Condition 9.

**PART II**  
**EMISSION LIMITATIONS AND MONITORING REQUIREMENTS**

Beginning June 12, 2001, the permittee is authorized to construct air emissions equipment for the emission of air contaminants from the Hydrogen Plant III, Emission Point AA-542, the 38 MMBTUH Feedstock Furnace(Reference No. F-8610).

The air emissions equipment shall be constructed to comply with the emission limitations and monitoring requirements specified below.

**EMISSION LIMITATIONS**

|                    |  |
|--------------------|--|
| Particulate Matter | 0.425 lbs/hr and 1.24 tons/year, as determined by EPA Test Methods 1-5, 40 CFR 60, Appendix A.   |
| PM <sub>10</sub>   | 0.425 lbs/hr and 1.24 tons/year as determined by EPA Test Method 201 or 201A in conjunction with Test Method 202, 40 CFR 51, Appendix M. |
| Sulfur Dioxide     | 2.34 lbs/hr and 5.89 tons/year, as determined by EPA Test Method 6, 40 CFR 60, Appendix A.   |
| Nitrogen Oxides    | 5.59 lbs/hr and 16.32 tons/year, as determined by EPA Test Method 7, 40 CFR 60, Appendix A.  |
| Carbon Monoxide    | 10.29 lbs/hr and 12.02 tons/year, as determined by EPA Test Method 10, 40 CFR 60, Appendix A.  |
| Sulfuric Acid      | 0.04 lbs/hr and 0.09 tons/year, as determined By EPA Test Method 8, 40 CFR 60, Appendix A.   |
| Opacity            | 40% as determined by EPA Test Method 9, 40 CFR 60, Appendix A.   |

All test methods specified above shall be those versions, or their approved equivalents, which are in effect June 12, 2001.

**FUEL RESTRICTIONS**

Fuels other than Natural Gas and Refinery Fuel Gas (RFG) are prohibited.

### **STANDARD FOR SULFUR DIOXIDE**

The permittee shall not combust any fuel gas that contains Hydrogen Sulfide (H<sub>2</sub>S) in excess of 0.10 grains/dry standard cubic feet (gr/dscf).

### **MONITORING REQUIREMENTS**

The permittee shall record and maintain records of the amounts of each fuel combusted during each day.

The permittee shall collect weekly fuel samples in an as-fired condition and analyze for sulfur content.

The permittee shall install, calibrate, maintain, and operate an instrument for continuously monitoring and recording the concentration by volume (dry basis, zero percent excess air) of SO<sub>2</sub> emissions into the atmosphere. The monitor shall include an oxygen monitor for correcting the data for excess air.

In place of the SO<sub>2</sub> monitor, an instrument for continuously monitoring and recording the concentration (dry basis) of H<sub>2</sub>S in fuel gases before being burned in a fuel gas combustion device may be used.

- (i) The span value for this instrument is 0.186 grains/dry standard cubic feet (gr/dscf) H<sub>2</sub>S.
- (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 H<sub>2</sub>S in the fuel gas being burned.
- (iii) The performance evaluations for this H<sub>2</sub>S monitor under § 60.13(c) shall use Performance Specification 7. Method 11 shall be used for conducting the relative accuracy evaluations.

**PART II**  
**EMISSION LIMITATIONS AND MONITORING REQUIREMENTS**

Beginning January 6, 2003, the permittee is authorized to construct air emissions equipment for the emission of air contaminants from the Blending Plant, Emission Point AA-611, the Storage Tanks listed below:

| <b>Tank Reference No.</b> | <b>Capacity (Gallons)</b> | <b>Tank Type</b>              |
|---------------------------|---------------------------|-------------------------------|
| <b>T-501</b>              | <b>5,070,072</b>          | <b>External Floating Roof</b> |
| <b>T-503</b>              | <b>7,477,512</b>          | <b>Fixed Roof</b>             |
| <b>T-506</b>              | <b>7,478,352</b>          | <b>Vertical Fixed Roof</b>    |
| <b>T-507</b>              | <b>7,480,242</b>          | <b>Vertical Fixed Roof</b>    |

Such air emissions equipment shall be constructed in accordance with design criteria in the application, plans, and other technical documents submitted with the application to construct.

**PART II**  
**EMISSION LIMITATIONS AND MONITORING REQUIREMENTS**

Beginning January 6, 2003, the permittee is authorized to construct air emissions equipment for the emission of air contaminants from Emission Point AA-621, Coke Storage and Handling.

The air emissions equipment shall be constructed to comply with the emission limitations and monitoring requirements specified below.

**EMISSION LIMITATIONS**

Visible Emissions                      0%, as determined by EPA Test Method 22, 40 CFR 60, Appendix A.

All test methods specified above shall be those versions, or their approved equivalents, which are in effect January 6, 2003.

The permittee shall apply adequate water or chemical dust suppressants to the coke pile and transfer points to prevent the discharge into the atmosphere of visible emissions in excess of 0% opacity and to prevent dust loss from coke transfer, pile building, and wind effects.

**MONITORING OF OPERATIONS**

The permittee shall conduct visible emissions tests of Emission Point AA-621 with EPA Reference Test Method 22 of 40 CFR 60, Appendix A, on a daily basis and whenever there is a public complaint of visible emissions. Testing shall be conducted during daylight hours and during conditions representative of normal operation. Observations shall be recorded for at least three (3) 6-minute periods each day. If any visible emissions are observed, the permittee shall report the visible emissions as a potential deviation and the permittee shall:

- (a) Within one (1) hour, initiate corrective actions to eliminate the visible emissions. Verify that the air emissions equipment and/or any associated pollution control equipment is operating normally, in accordance with design and standard procedures, and under the same conditions in which compliance was achieved in the past.

**RECORDKEEPING AND REPORTING REQUIREMENTS**

The permittee shall maintain sufficient records documenting:

- (a) Identification of stack and/or Emission Point;

- (b) Results of all required visual observations.
- (c) Description of corrective actions taken and a statement of verification, the emission unit and, if applicable, associated pollution control device are operating in accordance with design and standard procedures. Otherwise, operating normally;
- (d) Date and time any visible emissions were abated.

The permittee shall maintain on site all records and data used to determine visible emissions for a period of five (5) years following the date of such record and be made available for review upon request from Mississippi Department of Environmental Quality (MDEQ) personnel.

The permittee shall submit semiannual reports providing an identification of the stack and/or emission point; results of all required visual observations/tests, the nature and cause of any visible emissions, the corrective action taken or preventive measures adopted; and date and time visible emissions were observed and abated.

The report shall be postmarked no later than 30 days following the end of each calendar half.

**PART II**  
**EMISSION LIMITATIONS AND MONITORING REQUIREMENTS**

Beginning January 6, 2003, the permittee is authorized to construct air emissions equipment for the emission of air contaminants from AROMAX, Emission Point AA-752, the Naphtha Hydrotreater Section equipped with a 39.2 MMBTUH Furnace (Reference No. F-2410).

The air emissions equipment shall be constructed to comply with the emission limitations and monitoring requirements specified below.

**EMISSION LIMITATIONS**

|                            |   |
|----------------------------|---|
| Particulate Matter         | 0.30 lbs/hr and 1.30 tons/year, as determined by EPA Test Methods 1-5, 40 CFR 60, Appendix A.                                       |
| PM <sub>10</sub>           | 0.30 lbs/hr and 1.30 tons/year, as determined by EPA Test Method 201 or 201A in conjunction Test Method 202, 40 CFR 51, Appendix M. |
| Sulfur Dioxide             | 2.41 lbs/hr and 6.08 tons/year, as determined by EPA Test Method 6, 40 CFR 60, Appendix A.  |
| Carbon Monoxide            | 5.76 lbs/hr and 4.87 tons/year, as determined by EPA Reference Method 10, 40 CFR 60, Appendix A                                     |
| Nitrogen Oxides            | 4.08 lbs/hr and 12.00 tons/year, as determined by EPA Test Method 7, 40 CFR 60, Appendix A.   |
| Volatile Organic Compounds | 0.22 lbs/hr and 0.94 tons/year, as determined by EPA Test Method 25, 40 CFR 60, Appendix A.   |
| Sulfuric Acid              | 0.04 lbs/hr and 0.09 tons/year, as determined by EPA Test Method 8, 40 CFR 60, Appendix A.  |
| Opacity                    | 40% as determined by EPA Test Method 9, 40 CFR 60, Appendix A.  |

All test methods specified above shall be those versions, or their approved equivalents, which are in effect January 6, 2003.

\* The particulate matter, nitrogen oxide, carbon monoxide and volatile organic compound emissions established in a previous Permit to Construct issued January 3, 2000.

### **FUEL RESTRICTIONS**

Fuels other than Natural Gas and Refinery Fuel Gas (RFG) are prohibited.

### **STANDARD FOR SULFUR DIOXIDE**

The permittee shall not combust any fuel gas that contains Hydrogen Sulfide (H<sub>2</sub>S) in excess of 0.10 grains/dry standard cubic feet (gr/dscf).

### **TEST METHODS AND PROCEDURES**

Within 60 days after achieving the maximum production rate at which Emission Point AA-752 will be operated, but no later than 180 days of any physical (or operational) change to the AROMAX, naphtha hydrotreater section furnace (see Part III, Notification Requirements, item 11), the permittee shall demonstrate compliance with the particulate matter (PM), sulfur dioxide (SO<sub>2</sub>), nitrogen oxides (NO<sub>x</sub>), carbon monoxide (CO) and sulfuric acid emission limitation by stack testing as specified below and biennially thereafter.

- (1) Particulate Matter utilizing EPA Reference Methods 1-5.
- (2) Sulfur Dioxide utilizing EPA Reference Method 6
- (3) Nitrogen Oxides utilizing EPA Reference Method 7
- (4) Carbon Monoxide utilizing EPA Reference Method 10
- (5) Sulfuric Acid utilizing EPA Reference Method 8

For the purpose of demonstrating compliance, the permittee shall operate the emission unit at its maximum capacity.

A pretest conference at least thirty (30) days prior to the scheduled test date is needed to ensure that all test methods and procedures are acceptable to the Office of Pollution Control. Also, the Office of Pollution Control must be notified prior to the scheduled test date. At least ten (10) days notice shall be given so that an observer may be scheduled to witness the test(s).

### **MONITORING REQUIREMENTS**

The permittee shall record and maintain records of the amounts of each fuel combusted during each day.

The permittee shall collect weekly fuel samples in an as-fired condition and analyze for sulfur

content.

The permittee shall install, calibrate, maintain, and operate an instrument for continuously monitoring and recording the concentration by volume (dry basis, zero percent excess air) of SO<sub>2</sub> emissions into the atmosphere. The monitor shall include an oxygen monitor for correcting the data for excess air.

In place of the SO<sub>2</sub> monitor, an instrument for continuously monitoring and recording the concentration (dry basis) of H<sub>2</sub>S in fuel gases before being burned in a fuel gas combustion device may be used.

- (i) The span value for this instrument is 0.186 grains/dry standard cubic feet (gr/dscf) H<sub>2</sub>S.
- (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 H<sub>2</sub>S in the fuel gas being burned.
- (iii) The performance evaluations for this H<sub>2</sub>S monitor under § 60.13(c) shall use Performance Specification 7. Method 11 shall be used for conducting the relative accuracy evaluations.

**PART II**  
**EMISSION LIMITATIONS AND MONITORING REQUIREMENTS**

Beginning January 6, 2003, the permittee is authorized to construct air emissions equipment for the emission of air contaminants from AROMAX, Emission Point AA-753, comprising six (6) furnaces. Total combined heat input capacity is 550 MMBTUH (Reference No. F-2440, F-2450, F-2460, F-2470, F-2480 & F-2490, respectively). Air emissions generated from fuel combustion are vented through a single exhaust stack.

The air emissions equipment shall be constructed to comply with the emission limitations and monitoring requirements specified below.

**EMISSION LIMITATIONS \***

|                            |   |
|----------------------------|---|
| Particulate Matter         | 4.18 lbs/hr and 18.30 tons/year, as determined by EPA Test Methods 1-5, 40 CFR 60, Appendix A   |
| PM <sub>10</sub>           | 4.18 lbs/hr and 18.30 tons/year, as determined by EPA Test Method 201 or 201A in conjunction with Test Method 202, 40 CFR 51, Appendix M. |
| Sulfur Dioxide             | 33.80 lbs/hr and 85.32 tons/year, as determined by EPA Test Method 6, 40 CFR 60, Appendix A.  |
| Nitrogen Oxides            | 40.2 lbs/hr and 153.5 tons/year, as determined by EPA Test Method 7, 40 CFR 60, Appendix A.   |
| Carbon Monoxide            | 81.00 lbs/hr and 62.02 tons/year, as determined by EPA Test Method 10, 40 CFR 60, Appendix A.   |
| Volatile Organic Compounds | 3.03 lbs/hr and 13.20 tons/year, as determined by EPA Test Method 25, 40 CFR 60, Appendix A.  |
| Sulfuric Acid              | 0.52 lbs/hr and 1.32 tons/year, as determined by EPA Test Method 8, 40 CFR 60, Appendix A.  |
| Opacity                    | 40% as determined by EPA Test Method 9, 40 CFR 60, Appendix A.  |

All test methods specified above shall be those versions, or their approved equivalents, which are in effect January 6, 2003.

- \* The particulate matter, nitrogen oxide, carbon monoxide and volatile organic compound emissions established in a previous Permit to Construct issued January 3, 2000.

The emission limitations are representative of the total combined emission limitations for the six (6) furnaces.

### **FUEL RESTRICTIONS**

Fuels other than Natural Gas and Refinery Fuel Gas (RFG) are prohibited.

### **STANDARD FOR SULFUR DIOXIDE**

The permittee shall not combust any fuel gas that contains Hydrogen Sulfide (H<sub>2</sub>S) in excess of 0.10 grains/dry standard cubic feet (gr/dscf).

### **TEST METHODS AND PROCEDURES**

Within 60 days after achieving the maximum production rate at which Emission Point AA-753 will be operated, but no later than 180 days of any physical (or operational) change to the AROMAX six (6) process furnaces (see Part III, Notification Requirements, item 11), the permittee shall demonstrate compliance with the particulate matter (PM), sulfur dioxide (SO<sub>2</sub>), nitrogen oxides (NO<sub>x</sub>), carbon monoxide (CO) and sulfuric acid emission limitation by stack testing as specified below and biennially thereafter.

- (1) Particulate Matter utilizing EPA Reference Method(s) 1-5
- (2) Sulfur Dioxide utilizing EPA Reference Method 6
- (3) Nitrogen Oxides utilizing EPA Reference Method 7
- (4) Carbon Monoxide utilizing EPA Reference Method 10
- (5) Sulfuric Acid utilizing EPA Reference Method 8

For the purpose of demonstrating compliance, the permittee shall operate the emission unit at its maximum capacity. The six (6) process furnaces must be tested simultaneously.

A pretest conference at least thirty (30) days prior to the scheduled test date is needed to ensure that all test methods and procedures are acceptable to the Office of Pollution Control. Also, the Office of Pollution Control must be notified prior to the scheduled test date. At least ten (10) days notice shall be given so that an observer may be scheduled to witness the

test(s).

### **MONITORING REQUIREMENTS**

The permittee shall record and maintain records of the amounts of each fuel combusted during each day.

The permittee shall collect weekly fuel samples in an as-fired condition and analyze for sulfur content.

The permittee shall install, calibrate, maintain, and operate an instrument for continuously monitoring and recording the concentration by volume (dry basis, zero percent excess air) of SO<sub>2</sub> emissions into the atmosphere. The monitor shall include an oxygen monitor for correcting the data for excess air.

In place of the SO<sub>2</sub> monitor, an instrument for continuously monitoring and recording the concentration (dry basis) of H<sub>2</sub>S in fuel gases before being burned in a fuel gas combustion device may be used.

- (i) The span value for this instrument is 0.186 grains/dry standard cubic feet (gr/dscf) H<sub>2</sub>S.
- (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 H<sub>2</sub>S in the fuel gas being burned.
- (iii) The performance evaluations for this H<sub>2</sub>S monitor under § 60.13(c) shall use Performance Specification 7. Method 11 shall be used for conducting the relative accuracy evaluations.

**PART II**  
**EMISSION LIMITATIONS AND MONITORING REQUIREMENTS**

Beginning January 6, 2003, the permittee is authorized to construct air emissions equipment for the emission of air contaminants from the Utilities/Environmental/PP (Plant No. 36), Emission Point AA-851, the Cooling Water System - Cooling Tower No. 3 (Reference No. E-36401).

Such air emissions equipment shall be constructed in accordance with design criteria in the application, plans, and other technical documents submitted with the application to construct.

**PART II**  
**EMISSION LIMITATIONS AND MONITORING REQUIREMENTS**

Beginning June 12, 2001, the permittee is authorized to construct air emissions equipment for the emission of air contaminants from Emission Point AB-290, Transfer Operations - Marine Vessels.

This emission point includes fugitive volatile organic emissions generated from the transport (i.e., loading losses, ballasting losses and transit losses) of petroleum products, specifically, regular unleaded gasoline, vacuum gas oil (VGO) and No. 2 diesel fuel oil.

Such air emissions equipment shall be constructed in accordance with design criteria in the application, plans, and other technical documents submitted with the application to construct.

**PART II**  
**EMISSION LIMITATIONS AND MONITORING REQUIREMENTS**

Beginning October 11, 2005, the permittee is authorized to construct air emissions equipment for the emission of air contaminants from the Wastewater Treater Unit, Emission Point AB-332, The Caustic Scrubber (Reference No. C-9580).

The wastewater treater ammonia gas stream is vented to Emission Point AA-381, the No.1 Flare (Reference No. 3801) or Emission Point AA-382, the No.2 Flare (Reference No. F-3802).

**OPERATIONAL LIMITATIONS**

The permittee is authorized to flare wastewater treater ammonia gases a total combined maximum of 720 hours in each consecutive 365-day period. The flaring rate of ammonia from the Caustic Scrubber may not exceed 69.8 tons per day.

**CONTROL DEVICE REQUIREMENTS**

Emission Point AA-381, the No. 1 Flare and Emission Point AA-382, the No. 2 Flare, shall be operated at all times when emissions may be vented to it. The flares shall be operated with no visible emissions as determined by the methods specified in the Monitoring Requirements, except for periods not to exceed a total of five (5) minutes during any two (2) consecutive hours.

**MONITORING OF OPERATIONS**

Emission Point AA-381 and Emission Point AA-382 shall be operated with a flame present at all times. The presence of a flare pilot flame shall be monitored using a device (including but not limited to, a thermocouple, ultra-violet beam sensor, infrared sensor, or any other equivalent device) capable of continuously detecting the presence of a pilot flame.

The permittee shall monitor Emission Point AA-381 and Emission Point AA-382 to ensure that it is operated and maintained in accordance with its design.

The permittee shall conduct a visible emissions test of Emission Point AA-381 and Emission Point AA-382 with EPA Reference Test Method 22 of 40 CFR 60, Appendix A, as soon as any intentional or unintentional release of wastewater treater ammonia gases to the flare occurs (no later than one (1) hour after the release) and whenever there is a public complaint of visible emissions. Observations shall be recorded for at least three (3) 6-minute periods. If any visible emissions (not including condensed water vapor) are observed, the permittee shall report the visible emissions as a potential deviation and the permittee shall:

- (a) Within one (1) hour, initiate corrective actions to eliminate the visible emissions. Verify that the air emissions equipment and/or any associated pollution control equipment is operating normally, in accordance with design and standard procedures, and under the same conditions in which compliance was achieved in the past.
- (b) Within 24 hours of the end of the Method 22 test in which visible emissions were observed and at least once per day until there is no indication of visible emissions, a certified visual emissions observer shall conduct an opacity test of each stack from which visible emissions were observed in accordance with EPA Reference Test Method 9, 40 CFR 60, Appendix A. The duration of the method 9 test shall be thirty (30) minutes.

By April 11, 2006, the permittee shall install and operate a flow meter for continuously monitoring ammonia flared from the Caustic Scrubber.

#### **RECORDKEEPING AND REPORTING REQUIREMENTS**

For Emission Point AB-332, for each consecutive 365-day period, the permittee shall record and maintain adequate records of waste water treater ammonia flaring including, but not limited to, the maximum daily and total hours of wastewater treater ammonia flaring and a description of the nature and cause of the wastewater treater ammonia flaring.

For Emission Point AA-381 and Emission Point AA-382, the permittee shall maintain sufficient records documenting:

- (a) Identification of stack and/or Emission Point;
- (b) Results of all required visual observations. To include Method 9 testing results when applicable;
- (c) Description of corrective actions taken and a statement of verification, the emission unit and, if applicable, associated pollution control device are operating in accordance with design and standard procedures. Otherwise, operating normally;
- (d) Date and time any visible emissions were abated.

The permittee shall maintain on site all records and data for a period of five (5) years following the date of such record and be made available for review upon request from Mississippi Department of Environmental Quality (MDEQ) personnel.

The permittee shall submit semiannual reports providing:

- (a) The date, time and duration of wastewater treater ammonia flaring;

- (b) The maximum daily and total hours of wastewater treater ammonia flaring;
- (c) A description of the nature and cause of any wastewater treater ammonia flaring;
- (d) The daily amount of ammonia flared from the reflux drum in tons per day;
- (e) An identification of the stack and/or emission point;
- (f) The results of all required visual observations, including Method 9 testing results when applicable; and
- (g) The nature and cause of any visible emissions, the corrective action taken or preventive measures adopted; date and time visible emissions were observed and abated, and the duration of visible emissions.

The report shall be postmarked no later than 30 days following the end of each calendar half.

**PART II**  
**EMISSION LIMITATIONS AND MONITORING REQUIREMENTS**

Beginning June 12, 2001, the permittee is authorized to construct air emissions equipment for the emission of air contaminants from Wastewater Treater (Plant No. 95), Emission Point AB-479, the Ammonia Purification System - Cooling Tower (Reference No. E-9573).

Such air emissions equipment shall be constructed in accordance with design criteria in the application, plans, and other technical documents submitted with the application to construct.

**EMISSION LIMITATIONS AND MONITORING REQUIREMENTS**

Beginning October 11, 2005, the permittee is authorized to construct air emissions equipment for the emission of air contaminants from the Portable Seasonal Cooling Towers with drift eliminators (two temporary cooling towers for Plant 11, Crude I, and two temporary cooling towers for Plant 84, VDU).

Such air emissions equipment shall be constructed in accordance with design criteria in the application, plans, and other technical documents submitted with the application to construct.

**PART III  
OTHER REQUIREMENTS**

- (1) This facility is subject to and shall comply with the Maximum Achievable Control Technology (MACT) Standards as described in 40 CFR 63, Subpart A, General Provisions for the National Emission Standards for Hazardous Air Pollutants (NESHAP) Source Categories and 40 CFR 63, Subpart CC - National Emission Standards for Hazardous Air Pollutants from Petroleum Refineries.
- (a) This subpart applies to petroleum refining process units and to related emission points that are specified in § 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).
- (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) that are located at a single refinery plant site.
- (c) The affected source subject to this subpart does not include the emission points listed in § 63.640(d)(1) through (d)(5).

Where applicable, the facility shall comply with the specific requirements of 40 CFR 63, Subpart F - National Emission Standards for Synthetic Organic Chemical Manufacturing Industry (SOCMI); Subpart G - National Emission Standards for Organic Hazardous Air Pollutants from SOCMI Process Vents, Storage Vessels, Transfer Operations, and Wastewater; 40 CFR 63, Subpart - H, National Emission Standards for Organic Hazardous Air Pollutants for Equipment Leaks; and 40 CFR 63, Subpart Y - National Emission Standards for Marine Tank Vessel Loading Operations.

- (2) This facility is subject to and shall comply with the National Emission Standards for Hazardous Air Pollutants (NESHAP) as described in 40 CFR 61, Subpart FF – National Emission Standard for Benzene Waste Operations.
- (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 § 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 61.340(a).

- (c) At each facility identified in 61.340(a) or (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; and
  - (2) Waste that is contained in a segregated storm water sewer system.
- (3) Emission Points AA-052, AA-223, AA-165, AA-174, AA-231, AA-501, AA-502, AA-511, AA-512, AA-513, AA-521, AA-522, AA-523, AA-531, AA-542, AA-541, AA-752, and AA-753, are subject to and shall comply with the New Source Performance Standards (NSPS), as described in 40 CFR 60, Subpart A - General Provisions and the specific requirements outlined in 40 CFR 60, Subpart J - Standards of Performance for Petroleum Refineries.
- (4) The facility is subject to and shall comply with the New Source Performance Standards (NSPS), as described in 40 CFR 60, Subpart A - General Provisions and the specific requirements outlined in 40 CFR 60, Subpart K - Standards of Performance for Storage Vessels for Petroleum Liquids for Which Construction, Reconstruction, or Modification Commenced After June 11, 1973, and Prior to May 19, 1978.
- (a) Except as provided in § 60.110(b), the affected facility to which this subpart applies is each storage vessel for petroleum liquids which has a storage capacity greater than 151,412 liters (40,000 gallons).
  - (b) This subpart does not apply to storage vessels for petroleum or condensate stored, processed, and/or treated at a drilling and production facility prior to custody transfer.
  - (c) Subject to the requirements of this subpart is any facility under § 60.110(a) which:
    - (1) Has a capacity greater than 151,416 liters (40,000 gallons), but not exceeding 246,052 liters (65,000 gallons), and commences construction or modification after March 8, 1974, and prior to May 19, 1978.
    - (2) Has a capacity greater than 246,052 liters (65,000 gallons) and commences construction or modification after June 11, 1973, and prior to May 19, 1978.

The control requirements in 40 CFR 63, Subpart CC - National Emission Standards for Hazardous Air Pollutants from Petroleum Refineries, reference the storage vessel provisions in 40 CFR 63, Subpart G. The MACT standard is applicable to all new Group 1 storage vessels and to existing facilities not governed by 40 CFR 60, Subpart Kb. For Group 2 storage vessels, if the control requirements of 40 CFR 60, Subparts K, Ka or Kb do not apply, the storage vessel is subject to 40 CFR 63, Subpart CC. All storage vessels that are not subject to 40 CFR 60, Subparts K, Ka

or Kb, are subject to the MACT standard.

- (5) The facility is subject to and shall comply with the New Source Performance Standards (NSPS), as described in 40 CFR 60, Subpart A - General Provisions and the specific requirements outlined in 40 CFR 60, Subpart Ka - Standards of Performance for Storage Vessels for Petroleum Liquids for Which Construction, Reconstruction, or Modification Commenced After May 18, 1978, and Prior to July 23, 1984.
- (a) Except as provided in § 60.110a(b), the affected facility to which this subpart applies is each storage vessel for petroleum liquids which has a storage capacity greater than 151,416 liters (40,000 gallons) and for which construction is commenced after May 18, 1978.
- (b) Each petroleum liquid storage vessel with a capacity of less than 1,589,873 liters (420,000 gallons) used for petroleum or condensate stored, processed, or treated prior to custody transfer is not an affected facility and, therefore, is exempt from the requirements of this subpart.

The control requirements in 40 CFR 63, Subpart CC - National Emission Standards for Hazardous Air Pollutants from Petroleum Refineries, reference the storage vessel provisions in 40 CFR 63, Subpart G. The MACT standard is applicable to all new Group 1 storage vessels and to existing facilities not governed by 40 CFR 60, Subpart Kb. For Group 2 storage vessels, if the control requirements of 40 CFR 60, Subparts K, Ka or Kb do not apply, the storage vessel is subject to 40 CFR 63, Subpart CC. All storage vessels that are not subject to 40 CFR 60, Subparts K, Ka or Kb, are subject to the MACT standard.

(6) **RECORDKEEPING REQUIREMENTS**

For each fuel combustion device burning Refinery Fuel Gas (RFG), the permittee shall record and maintain the following information:

- (a) The design heat capacity (MMBTUH) of each fuel combustion unit.
- (b) The amounts of each fuel combusted during each day, the maximum amount per hour (Mscf/hr) and the amount per year (MMscf/year) determined on a 12-month rolling average basis with a new yearly amount calculated at the end of the calendar month.
- (c) The 24-hour average hourly SO<sub>2</sub> emission rate (in pounds/hour) for each combustion unit and the 12-month rolling SO<sub>2</sub> emission total (in tons/year).
- (d) Each operating day the sulfur dioxide emission rates are in excess of the SO<sub>2</sub> emission rate established in the permit, the magnitude of the

excess emissions, the reason for excess emissions and a description of the corrective action or preventive measures taken. The permittee shall report within two (2) working days of any deviations from permit requirements, including those attributable to upsets, and the report shall include the cause of such deviations, and any corrective actions or preventive measures taken. Corrective actions may include a requirement for additional stack testing, or more frequent monitoring, or could trigger implementation of a corrective action plan.

Excess emissions shall be defined as all rolling 3-hour periods during which the average concentration of H<sub>2</sub>S as measured by a H<sub>2</sub>S continuous monitoring system exceeds 0.10 gr/dscf.

- (e) Any compliance test reports or quality assurance checks for the H<sub>2</sub>S monitoring system.
- (f) Calculations, data and a description of the method(s) used to determine the sulfur dioxide data and the sulfur dioxide emission rates.
- (g) A copy of the facility's Monitoring Plan.

The permittee shall develop and submit for approval a monitoring plan which shall become an effective portion of this permit.

For fuel combustion sources burning refinery fuel gas where the applicable requirement (e.g., Commission Regulation, Regulation APC-S-1, "Air Emission Regulations for the Prevention, Abatement, and Control of Air Contaminants") does not require periodic testing or instrumental or noninstrumental monitoring, the periodic monitoring requirements applicable to Part III, Other Conditions, No. 3, shall apply.

- (7) The permittee shall maintain on site all records, data and calculations required by this section for a period of five (5) years following the date of such record and be made available for review upon request from (MDEQ) personnel.

(8) **REPORTING REQUIREMENTS**

The permittee shall submit semiannual reports providing the following information:

- (a) The design heat capacity of each combustion unit,
- (b) The total quantity of each fuel combusted during each semiannual reporting period,

- (c) The calculated 24-hour average hourly SO<sub>2</sub> emission rate (in pounds/hour) for each combustion unit and the 12-month rolling SO<sub>2</sub> emission total (in tons/year).
  - (d) Calculations, data and a description of the method(s) used to determine the sulfur dioxide data and the sulfur dioxide emission rate.
- (9) The permittee shall submit the reports to MDEQ Office of Pollution Control semiannually for each six-month period. All semiannual reports shall be postmarked by the 30th day following the end of each six-month period.
- (10) For Emission Point AA-851, the Cooling Water System - Cooling Tower No. 3 and Emission Point AB-479, the Ammonia Purification System - Cooling Tower, the permittee must provide written notification of the date construction was commenced, the date construction was completed, and the actual date of initial startup. Each date must be provided no later than ten (10) days after the actual date.

**(11) NOTIFICATION REQUIREMENTS**

For Emission Points AA-011, AA-012, AA-043, AA-051, AA-052, AA-111, AA-150, AA-161, AA-162, AA-165, AA-174, AA-191, AA-192, AA-193, AA-194, AA-195, AA-211, AA-223, AA-245, AA-501, AA-502, AA-521, AA-522, AA-523, AA-531, AA-541(A), AA-541(B), AA-611, AA-752, AA-753, and AB-332, the permittee shall provide written notification of completion of any physical or operational change to the specified emission points to operate the air emissions equipment in accordance with the emission limitations and monitoring requirements established herein. The notification shall include the date of completion of the change, a description of the precise nature of the change, the date of startup in the new operational mode and the date maximum production rates for which the emission units will be operated are reached. Each date must be provided no later than ten (10) days after the actual date.

**(12) SULFURIC ACID PERFORMANCE TESTING**

In lieu of using the sulfuric acid test method (EPA Method 8) specified in Part II of this permit, the permittee shall:

- (a) Propose an alternative test method to MDEQ no later than September 16, 2003;
- (b) Complete testing within 60 days of receipt of notification of approval of method from MDEQ;
- (c) Submit a final test report within 45 days of completion of testing.

In lieu of testing every process heater and furnace combusting refinery fuel gas, the permittee shall test one or more of the process heaters and furnaces specified below for sulfuric acid. If the results of the testing do not appear to be representative of the group of process heaters/furnaces or do not meet the emission limitations set forth in this permit, the DEQ may require additional testing.

| Group | DEQ Emission Point(s) | Chevron Reference(s) | # Required to be Tested |
|-------|-----------------------|----------------------|-------------------------|
|       |                       |                      |                         |

|  |  |  |   |
|--|--|--|---|
| Boxed furnace, induced draft, > 100 MMBTU/hr                                 | AA-011, AA-012, AA-043, and AT-211                                 | F-1102, F-1101, F-1501/1502/1503, F-6101 and F-6102                            | 1 |
| Vertical cylindrical furnace, natural draft with ULNBs                       | AA-161, AA-162, AA-165, AA-174, AA-191, AA-192, AA-052, and AA-223 | F-5327A, F-5327B, F-5327C, F-5337C, F-5337A, F-5337B, F-1601, and F-6250       | 3 |
| Vertical cylindrical furnace, natural draft with standard or low-NOx burners | AA-193, AA-194, AA-195, AA-245, and AA-752                         | F-5380A, F-5380B, F-5387, F-6531, and F-2410                                   | 2 |
| FCC Regenerator  | AA-051   | F-1603   | 1 |
| Boxed furnace, natural draft, > 100 MMBTU/hr                                 | AA-502, AA-521, AA-522, AA-523, AA-531, and AA-753                 | F-8560, F-8300A, F-8300B, F-8300C, F-8400, and F-2440/2450/2460/2470/2480/2490 | 3 |

- (13) The facility is subject to and shall comply with the National Emission Standards for Hazardous Air Pollutants (NESHAP) for Industrial, Commercial, and Institutional Boilers and Process Heaters, 40 CFR Part 63, Subpart DDDDD. Initial notification for any affected boilers and/or process heaters, as defined in § 63.7490, should be submitted in accordance with § 63.7545.
- (14) The facility is subject to and shall comply with the National Emission Standards for Hazardous Air Pollutants (NESHAP) for Stationary Combustion Turbines, 40 CFR Part 63, Subpart YYYY. However, there are no requirements under this subpart or 40 CFR Part 63, Subpart A (General Provisions) applicable to the existing turbines. (Ref.: § 63.6085 and § 63.6090(b)(4))
- (15) The facility is subject to and shall comply with the National Emission Standards for Hazardous Air Pollutants (NESHAP) for Source Categories as described in 40 CFR Part 63, Subpart UUU - NESHAP for Petroleum Refineries: Catalytic Cracking Units, Catalytic Reforming Units, and Sulfur Recovery Units; and 40 CFR Part 63, Subpart A - General Provisions. The permittee shall comply with the applicable requirements of the subpart by the dates specified in §63.1563.
- (a) This subpart applies to the following new, reconstructed, or existing affected source(s) at a petroleum refinery:
- (1) Each catalytic cracking unit that regenerates catalyst.
  - (2) Each catalytic reforming unit that regenerates catalyst.
  - (3) Each sulfur recovery unit and the tail gas treatment unit serving it.
  - (4) Each bypass line serving a new, existing, or reconstructed catalytic cracking unit, catalytic reforming unit, or sulfur recovery unit.
- (b) This subpart does not apply to those units listed in §63.1562(f)(1)-(5).
- (16) The facility is subject to and shall comply with the National Emission Standards for Hazardous Air Pollutants (NESHAP): Organic Liquid Distribution (40 CFR Part 63, Subpart EEEE) and the General Provisions (40 CFR

Part 63, Subpart A), as indicated in 40 CFR Part 63, Subpart EEEE, Table 12.

- (a) This subpart applies to an Organic Liquid Distribution (OLD) operation that is located at, or is part of, a major source of HAP emissions. An OLD may occupy an entire plant site or be collocated with other industrial operations at the same plant.
- (b) The affected source is the collection of activities and equipment used to distribute organic liquids into, out of, or within a facility that is a major source of HAP and includes activities and equipment listed in §63.2238(b)(1)-(4).
- (c) The equipment listed in §63.2238(c)(1)-(4) and used in the identified operations is excluded from the affected source. The exclusions include storage tanks, transfer racks, and equipment leak components that are part of an affected source under another 40 CFR Part 63 NESHAP.