

July XX, 2008

**DRAFT Permit: APC-81/0828-CONSTRUCTION (Amendment 2)(PSD-NSR)  
Crude Unit**

The Premcor Refining Group Inc.  
Delaware City Refinery  
4550 Wrangle Hill Rd.  
Delaware City, DE 19706

ATTENTION: Andrew Kenner  
Vice President and General Manager

Dear Mr. Kenner:

Pursuant to the State of Delaware **Regulations**, Regulation No. 1102, Section 2, Regulation No. 1125, Section 3, and the State of Delaware **Regulations Governing the Control of Air Pollution** (collectively hereafter "*Regulations*"), approval of the Department of Natural Resources and Environmental Control (Department) is hereby granted for the construction of equipment that will upgrade and optimize performance of the 191,100 Barrels per Day Crude Unit located at the Delaware City Refinery, 4550 Wrangle Hill Road in Delaware City, Delaware in accordance with the following documents:

- Application submitted on Form No. AQM-1 and AQM-3.1 dated November 30, 2007 signed by Andrew Kenner;
- Follow up Letter to DNREC's "Notification of Deficiency" dated January 14, 2008 addressed to Ravi Rangan and signed by Thomas S. Godlewski, Jr., and
- Secretary's Order No. 2008-A-00XX issued on DATE

This permit is issued subject to the following conditions:

**1. General Provisions**

- 1.1. This permit expires 18 months from the date of issuance.
- 1.2. The project shall be constructed in accordance with the application described above. If any changes are necessary, revised plans must be submitted and supplemental approval issued prior to actual construction.
- 1.3. Representatives of the Department may, at any reasonable time, inspect this facility.

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- 1.4. This permit may not be transferred to another location or to another piece of equipment or process.
- 1.5 This permit may not be transferred to another person, owner, or operator unless the transfer has been approved in advance by the Department. Approval (or disapproval) of the permit transfer will be provided by the Department in writing. A request for a permit transfer shall be received by the Department at least 30 days before the date of the requested permit transfer. This request shall include:
  - 1.5.1 Signed letters from each person stating the permit transfer is agreeable to each person; and
  - 1.5.2 An Applicant Background Information Questionnaire pursuant to 7 Del C, Chapter 79 if the person receiving the permit has not been issued any permits by the Department in the previous 5 years.
- 1.6 The applicant shall, upon completion of the construction, installation, or alteration, request that the Department grant approval to operate.
- 1.7 A separate application to operate pursuant to Regulation No. 1102 does not need to be submitted to the Department for the equipment or process covered by this construction permit. Upon a satisfactory demonstration by an on-site inspection that the equipment or process complies with all of the terms and conditions of this permit, the Department shall issue a Regulation No. 1102 Operation Permit for this equipment or process. The conditions in the existing operation permit shall remain in effect until construction authorized by this permit is completed.
- 1.8 The provisions of Regulation No. 1102 Sections 2.1 and 11.3 shall not apply to the operation of equipment or processes for the purposes of initially demonstrating satisfactory performance to the Department following construction, installation, modification, or alteration of the equipment or processes. The applicant shall notify the Department sufficiently in advance of the demonstration and shall obtain the Department's prior concurrence of the operating factors, time period, and other pertinent details relating to the demonstration.
- 1.9 The owner or operator shall not initiate construction, install, or alter any equipment or facility or air contaminant control device which will emit or prevent the emission of an air contaminant prior to submitting an application to the Department pursuant to Regulation No. 1102, and, when applicable Regulation No. 1125, and receiving approval of such application from the Department; except as authorized by this permit or exempted in Regulation No. 1102 Section 2.2 of the *Regulations*.

**2. Emission Limitations**

- 2.1. Air contaminant emission levels shall not exceed those specified in the *Regulations* and the following:

2.1.1 Volatile Organic Compound (VOC) Emissions

The leak detection and repair requirements to control fugitive VOC emissions from the Crude Unit shall be in accordance with the requirements in 40 CFR 60, Subpart GGG for existing components in light liquid and gaseous service and in accordance with 40 CFR part 63 subpart CC for new components in light liquid and gaseous service. The leak detection and repair requirements to control fugitive emissions from the Crude Unit shall be in accordance with the Consent Decree for both new and existing components in light liquid and gaseous service.

2.2. Odors from this source shall not be detectable beyond the plant property line in sufficient quantities such as to cause a condition of air pollution.

**3. Operational Limitations**

3.1. The Company shall comply with the following operational limits:

3.1.1. The crude unit throughput shall not exceed 191,100 barrels per day on a twelve (12) month rolling average basis.

3.1.2. There shall be no emissions of uncondensed VOCs from the condensers, hot wells or accumulators of any vacuum producing system.

3.1.3. The Company shall provide for the following during process unit turnarounds:

3.1.3.1. Depressurization venting of the process unit or vessel to a vapor recovery system, flare, or firebox.

3.1.3.2. No emission of VOC from a process unit or vessel until its internal pressure is 136 kiloPascals (kPa) (19.7 pounds per square inch atmospheric [psia]) or less.

3.2.

3.2.1. At all times, including periods of startup, shutdown, and malfunction, the Company shall, to the extent practicable, maintain and operate the facility including all associated air pollution control equipment in a manner consistent with good air pollution control practices for minimizing emissions.

3.2.2. All structural and mechanical components shall be maintained in proper operating condition.

**4. Compliance Methodology, Testing and Monitoring Requirements**

4.1. Compliance with Condition 3.1.1 shall be based on monitoring the daily throughput to the crude unit.

- 4.2. Compliance with Conditions 3.1.2 and 3.1.3 shall be based on either piping the uncondensed vapors to a firebox or incinerator. Alternately, the vapors may be compressed and added to the refinery fuel gas. During process unit turnarounds, the Company shall conduct depressurization venting of the process unit or vessel to a vapor recovery system, flare or firebox. The Company shall monitor the pressure in each process or vessel until its internal pressure is 136 kPa or less.
- 4.3. Compliance with the standards in 40 CFR subpart GGG shall be based on the test methods and procedures in 40 CFR 60.592 and compliance with the requirements of 40 CFR Part 63 subpart CC shall be based on the standards in 40 CFR 63.648.
- 4.4. Compliance with Condition 3.2 shall be based on information available to the Department concerning the Company's actions with respect to such events, and shall include the Department's review of all available facts and circumstances including, but not limited to, monitoring results, opacity observations, review of operating and maintenance procedures, and inspection of the source.

**5. Record Keeping Requirements**

- 5.1. The Company shall maintain all records necessary for determining compliance with this permit in a readily accessible location for 5 years and shall make these records available to the Department upon written or verbal request.
- 5.2. The following information shall be recorded and maintained:
  - 5.2.1. The 12 month rolling average throughput in MBPD to the crude unit;
  - 5.2.2. VOC leak repair records required by 40 CFR 60.592 for existing components in light liquid and gaseous service and 40 CFR 63.654 for new components in light liquid and gaseous service; and
  - 5.2.3. Date of process unit or vessel turnarounds and the internal pressure of the process unit or vessel immediately prior to venting to the atmosphere.

**6. Reporting Requirements**

- 6.1. Emissions in excess of any permit condition or emissions which create a condition of air pollution shall be reported to the Department immediately upon discovery by calling the Environmental Emergency Notification and Complaint number, (800) 662-8802.
- 6.2. In addition to complying with Condition 6.1 of this permit, the Company shall satisfy any reporting required by 7 Del C §6028 "**Reporting of a Discharge of a Pollutant or an Air Contaminant**" within 30 calendar days of becoming aware of an occurrence, subject to reporting pursuant to Condition 6.1. Further the Department may in its discretion require the Company to submit reports not otherwise required by the Regulation. All reports submitted to the Department pursuant to this Condition shall be submitted in writing and shall include the following information:

- 6.2.1 The name and location of the facility;
  - 6.2.2 The subject source(s) that caused the excess emissions or exceedances of emission or operational limitation;
  - 6.2.3 The time and date of the first observation of the excess emissions or exceedances of emission or operational limitation;
  - 6.2.4 The cause and expected duration of the excess emissions or exceedances of emission or operational limitation;
  - 6.2.5 The estimated rate of emissions (expressed in the units of the applicable emission or operational limitation) and the operating data and calculations used in determining the magnitude of the excess emissions or exceedances of emission or operational limitation; and
  - 6.2.6 The proposed corrective actions and schedule to correct the conditions causing the excess emissions or exceedances of emission or operational limitation.
  - 6.2.7 Emissions on the same day from the same emission unit may be combined into one report. Emissions from the same cause that occur contemporaneously may also be combined into one report.
  - 6.2.8 The Company shall submit an electronic copy of all required reports to the Department's compliance engineer assigned to the Refinery.
- 6.3. Leak detection and repair reports shall be submitted as required by 40 CFR 60.592 for existing components in light liquid and gaseous service and 40 CFR 63.654 for new components in light liquid and gaseous service.
- 6.4. One original of all required reports in hard copy format shall be sent to the address below:
- Air Quality Management Section  
Division of Air and Waste Management  
156 South State Street  
Dover, DE 19901
- One copy of all required reports in hard copy format shall be sent to the address below:
- Program Manager  
Engineering & Compliance Branch  
715 Grantham Lane  
New Castle, DE 19720

**7. Administrative Conditions**

- 7.1. This permit shall be made available on the premises
- 7.2. Failure to comply with the provisions of this permit may be grounds for suspension or revocation.

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**The Premcor Refining Group, Inc.**

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Sincerely,

DRAFT

Paul E. Foster, P.E.

Program Manager

Engineering & Compliance Branch

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pc:     Dover Title V File  
          Ravi Rangan, P.E.  
          Mark Lutrzykowski, P.E.  
          Bruce Steltzer