STATE OF DELAWARE
DEPARTMENT OF NATURAL RESOURCES
AND ENVIRONMENTAL CONTROL
OFFICE OF THE SECRETARY
89 KINGS HIGHWAY
DOVER, DELAWARE 19901
PHONE: (302) 739-9000
FAX: (302) 739-6242

NOTICE OF ADMINISTRATIVE PENALTY ASSESSMENT AND SECRETARY'S ORDER

Pursuant to 7 *Del. C.* § 6005

Order No. 2009-A-0021

PERSONALLY SERVED BY AN ENVIRONMENTAL ENFORCEMENT OFFICER

Issued To:
The Premcor Refining Group Inc.
Attn: Mr. Patrick Covert
Safety, Health and Environment Director
4450 Wrangle Hill Road
Delaware City, DE 19706

Registered Agent:
The Corporation Trust Company
Corporation Trust Center
1209 Orange Street
Wilmington, DE 19801

Dear Mr. Covert:

This letter is to notify The Premcor Refining Group Inc. ("Respondent") that the Secretary of the Department of Natural Resources and Environmental Control ("Department") has found Respondent in violation of 7 *Del. C.* Chapter 60 and accordingly, the Department is issuing this Notice of Administrative Penalty Assessment pursuant to 7 *Del. C.* § 6005(b)(3).

BACKGROUND

Respondent owns and operates a petroleum refinery located in Delaware City, Delaware ("Refinery"). Respondent manufactures various petroleum-based products, including gasoline, diesel, and jet fuels, and other marketable petroleum by-products at the refinery. **Permit: APC-81/830-OPERATION** was issued to Respondent on July 30, 1981, for the operation of a refinery blowdown system, which includes a flare system. This permit was issued pursuant to Regulation 2 of the State of Delaware's *Regulations Governing the Control of Air Pollution* (now known as 7 DE Admin. Code 1102 and hereinafter referred to as "Regulation 1102")The purpose of the flare system is to safely handle and dispose of combustible gases and vapors that are released during refinery upsets, startups, and shutdowns in order to minimize impacts on the environment. The conditions of this permit have since been incorporated into Part 2 of Respondent's Title V **Permit: AQM-003/00016-Part 2** issued May 27, 2008 pursuant to 7 DE Admin. Code 1130.

Although the Respondent is permitted by the Department to utilize the flare system to minimize impacts on the environment, the permit does not allow the emission of pollutants from the flare. Hydrocarbon flaring episodes are of concern to the Department because they have the potential to emit large amounts of criteria pollutants such as nitrogen oxides ("NO_X")and sulfur dioxide ("SO_2"). The amount of pollution emitted is dependant on the duration and rate of the flaring, along with the quantity and sourness (H_2S content) of the gas emitted from the flare.

From October of 2006 through December of 2007; January 4, 2008 and August 10-13, 2008, Respondent experienced hydrocarbon flaring episodes on 40 days. The specific dates of the incidents covered by this Order and a brief description of the flaring episodes are set out as follows:

October 2006 through December 2006

1. On October 14, 2006, hydrocarbon flaring occurred when the Continuous Catalyst Regenerator ("CCR") Unit tripped resulting in the unpermitted release of 228 pounds of SO_2 to the atmosphere.
2. On October 17, 2006, hydrocarbon flaring occurred when the CCR Unit tripped resulting in the unpermitted release of 319 pounds of SO_2 to the atmosphere.
3. On November 8, 2006, hydrocarbon flaring occurred when the Fluid Coker Unit's carbon monoxide boiler tripped resulting in the unpermitted release of 208 pounds of SO_2 to the atmosphere.
4. On December 4, 2006, hydrocarbon flaring occurred due to an upset at the Fluid Catalytic Cracking Unit ("FCCU") resulting in the unpermitted release of 445 pounds of SO_2 and 17 pounds of NO_X to the atmosphere.
5. On December 21, 2006, hydrocarbon flaring occurred due to light hydrocarbon vapors condensing in the cold flare line and restricting flow to the flare recovery compressors resulting in the unpermitted release of 914 pounds of SO_2.

January 2007 through December 2007

1. On January 8, 2007, seven separate hydrocarbon flaring events occurred during the day resulting in the unpermitted release of 224 pounds of SO_2 to the atmosphere. No conclusive source was identified.
2. On January 29, 2007, hydrocarbon flaring occurred when pressure safety valve 24-PSV-923 lifted at the FCCU Depropanizer tower below the set pressure resulting in the unpermitted release of 399 pounds of SO_2 to the atmosphere.
3. On February 5, 2007, hydrocarbon flaring occurred due to a false level indication on the high pressure separator from freeze up leading to increased flow and pressure in column 25-C-401 resulting in the unpermitted release of 220 pounds of SO_2 to the atmosphere.

4. On February 6, 2007, hydrocarbon flaring occurred due to restricted cooling water flow at the Polymerization Unit resulting in the unpermitted release of 323 pounds of SO_2 to the atmosphere. The restricted flow was caused by plugged cooling water strainers due to freezing temperatures, high winds and low tide.
5. On February 8, 2007, hydrocarbon flaring occurred upon unit startup and depressurizing from Desulfurizer Train 2 after maintenance on a feed pump resulting in the unpermitted release of 50 pounds of SO_2 to the atmosphere.
6. On February 9, 2007, two separate hydrocarbon flaring events occurred.
    - Pressure safety valve 24-PSV-923 lifted at the FCCU Depropanizer tower below the set pressure resulting in the unpermitted release of 323 pounds of SO_2 to the atmosphere.
    - Cold weather froze piping systems resulting in a fire. Operators began immediate shutdown and depressurizing of the unit and gasses were flared resulting in the unpermitted release of 7,397 pounds of SO_2 to the atmosphere.
7. On February 12, 2007, operators of the Hydrocracker Unit were steaming out equipment prior to blinding and maintenance activities. Hydrocarbon flaring occurred due to an increase in flare header pressure resulting in the unpermitted release of 111 pounds of SO_2 to the atmosphere.
8. On February 13, 2007, hydrocarbon flaring occurred when pressure safety valve 24-PSV-923 lifted at the FCCU Depropanizer tower below the set pressure resulting in the unpermitted release of 325 pounds of SO_2 to the atmosphere.
9. On February 14, 2007, hydrocarbon flaring occurred when pressure safety valve 24-PSV-923 lifted at the FCCU Depropanizer tower below the set pressure resulting in the unpermitted release of 324 pounds of SO_2 to the atmosphere.
10. On February 17, 2007, two brief hydrocarbon flaring events occurred due to low cooling water intake rates caused by freezing temperatures, high winds and low tide resulting in the unpermitted release of 159 pounds of SO_2 to the atmosphere.
11. On February 19-20, 2007, hydrocarbon flaring occurred when a leaking cooling water supply line resulted in water spray contacting an adjacent electrical panel which tripped three lighting panels and gas recovery compressor 21-K-1 resulting in the unpermitted release of 23,451 pounds of SO_2 to the atmosphere.
12. On April 2, 2007, operators were thawing a section of a line that was frozen due to a leaking PSV at the Alkyl Unit coalescer. Hydrocarbon flaring occurred when the line unplugged and caused a rapid release of propane to the flare header system resulting in the unpermitted release of 104 pounds of SO_2 to the atmosphere.
13. On May 1, 2007, hydrocarbon flaring occurred due to pressure build-up at the Poly Unit debutanizer during a period of increased flare header load due to low tide conditions resulting in the unpermitted release of 290 pounds of SO_2 to the atmosphere.

14. On May 4, 2007, hydrocarbon flaring occurred when a sticking valve actuator led to the automatic safety shutdown of the CCR pressure swing absorber unit resulting in the unpermitted release of 146 pounds of SO_2 to the atmosphere.
15. On July 9, 2007, hydrocarbon flaring occurred when a card that controls two instruments in the FCCU Alky Merox section failed resulting in the unpermitted release of 275 pounds of SO_2 to the atmosphere.
16. On July 15, 2007, a Polymerization Unit backwash operation was conducted at the same time as blenders operators were venting to the gas header. That operation, coupled with a river water temperature increase during a tide swing, caused hydrocarbon flaring resulting in the unpermitted release of 175 pounds of SO_2 to the atmosphere.
17. On July 18, 2007, hydrocarbon flaring occurred when build-up on a probe at the Crude Unit kept a controller in the open position resulting in the unpermitted release of 195 pounds of SO_2 to the atmosphere.
18. On July 26, 2007, two short intermittent hydrocarbon flaring events occurred for unknown reasons resulting in the unpermitted release of 170 pounds of SO_2 to the atmosphere.
19. On August 7-8, 2007, hydrocarbon flaring occurred when an upset at the foul water separator tripped the gas recovery compressor due to low seal water flow as well as during the subsequent repair process resulting in a total unpermitted release of 1,517 pounds of SO_2 to the atmosphere.
20. On October 4-5, 2007, hydrocarbon flaring occurred during the start-up of the CCR Unit and HDS Train 1 resulting in the unpermitted release of 562 pounds of SO_2 to the atmosphere.
21. On October 12, 2007, hydrocarbon flaring occurred when hydrogen gas was vented to the flare header line due to a malfunctioning solenoid at the CCR Unit pressure swing absorber leading to a shutdown of the PSA, resulting in the unpermitted release of 437 pounds of SO_2 to the atmosphere.
22. On October 22, 2007, hydrocarbon flaring occurred when flow control valve 50-FC-104X was open while the control system indicated to operators it was closed. Natural gas flowed into the system which subsequently over-pressurized resulting in the unpermitted release of 796 pounds of SO_2 to the atmosphere.
23. On November 14, 2007, CCR Unit operators were placing compressor 42-K-2A in service and it is believed the unloader valves were stuck closed. Hydrocarbon flaring occurred when the equipment over-pressurized resulting in the unpermitted release of 215 pounds of SO_2 to the atmosphere.
24. On November 24, 2007, hydrocarbon flaring occurred when the CCR Unit experienced high pressure and operators were unaware of the PSA shutdown because of a loose communication cable resulting in the unpermitted release of 146 pounds of SO_2 to the atmosphere.

25. On December 10, 2007, hydrocarbon flaring occurred when a compressor in the Cracked Naphtha Unit and a compressor in the Selective Hydrogenation Unit tripped causing the unit to vent hydrogen to the recovery system. It resulted in the unpermitted release of 178 pounds of SO_2 to the atmosphere.
26. On December 15, 2007, hydrocarbon flaring occurred when a pump at the FCCU tripped and a check valve failed resulting in the unpermitted release of 59 pounds of SO_2 to the atmosphere.
27. On December 27-28, 2007, hydrocarbon flaring occurred when a failed air line caused the CCR Unit compressor 42-K-2A to trip resulting in the unpermitted release of 199 pounds of SO_2 to the atmosphere.

January 4, 2008

On January 4, 2008, hydrocarbon flaring occurred as a result of an underwater sedment collapse that impacted the cooling water intake structure, resulting in multiple process units relieving to the flare header. This flaring event resulted in the unpermitted release of 15,049 pounds of SO_2; 10 pounds of nitrogen dioxide ("NO_2") and 128 pounds of nitrogen oxide ("NO").

August 10-13, 2008

On August 10-13, 2008, hydrocarbon flaring occurred when two motor control centers tripped, leading to the loss of several pumps which necessitated an instrumented shut down of the two wet gas compressors which in turn, led to a rise in the main refinery flare header pressure. This flaring event resulted in the unpermitted release of 282,307 pounds of SO_2; 2,641 pounds of NO_X and 754 pounds of H_2S, into the atmosphere.

Notices of Violation addressing the above listed violations were issued to Respondent as follows:

1. April 5, 2007, for the hydrocarbon flaring incidents that occurred on October 14, 2006, October 17, 2006, December 4, 2006 and December 21, 2006.
2. April 25, 2007, for the hydrocarbon flaring incident that occurred on November 8, 2006.
3. April 17, 2008 for the hydrocarbon flaring incidents listed above that occurred during calendar year 2007.
4. April 29, 2008 for the hydrocarbon flaring incident that occurred on January 4, 2008.
5. February 20, 2009 for the hydrocarbon flaring incident that occurred August 10-13, 2008.

FINDINGS OF FACT

1. Respondent has a Regulation 1102 permit, **Permit: APC-81/830-OPERATION,** from the Department to operate the flares, whose primary function is to safely burn waste gases from process operations.

2. The conditions of **Permit: APC-81/830-OPERATION** were incorporated into Part 2 of Respondent's Title V **Permit: AQM-003/00016-Part 2** issued May 27, 2008 pursuant to 7 DE Admin. Code 1130.

3. Respondent's permit to operate the flares does not authorize the emission of any air pollutant from the flares so that operation of the flares with any emission of air pollutant constitutes the discharge of an air contaminant without a permit.

4. Respondent experienced numerous hydrocarbon flaring events from October 2006 through December 2007; January 4, 2008 and August 10-13, 2008, resulting in the unpermitted release of air pollutants as described above in the Background Section of this Order.

STATUTORY VIOLATIONS

Seven *Del. C.* § 6003(a)(1) states:

> *"No person shall, without first having obtained a permit from the Secretary, undertake any activity in a way which may cause or contribute to the discharge of an air contaminant."*

CONCLUSION

Based on the above, Respondent violated 7 *Del. C.* § 6003(a)(1) by releasing SO_2, NO, NO_2 and NO_X into the atmosphere from hydrocarbon flaring episodes on the dates described in the Background Section of this Order, without a permit, thereby causing or contributing to the discharge of an air contaminant.

ASSESSMENT OF PENALTY

Pursuant to the provisions of 7 *Del. C.* § 6005(b)(3), this is written notice to Respondent that on the basis of its findings, the Department is assessing Respondent an administrative penalty of $75,000 for the violation identified in this Assessment and Order and costs according to 7 *Del. C.* § 6005(c). Respondent shall submit a check to the Department in the amount of $75,000 within 30 days from the receipt of this Assessment and Order for the aforementioned penalty. The check shall be made payable to the "State of Delaware" and shall be directed to: Valerie M. Satterfield, Deputy Attorney General, Department of Justice, Environmental Unit, 102 W. Water Street-3rd Floor, Dover, Delaware 19904.

PUBLIC HEARING

This Administrative Penalty Assessment and Order shall become effective and final unless the Department receives from Respondent, no later than 30 days from the receipt of this Notice, a written request for a public hearing on these matters as provided in 7 *Del. C.* § 6005(b)(3) and (c). In the event Respondent requests a hearing, the Department reserves the right to withdraw this Assessment and Order and take additional enforcement actions regarding these and other violations at Respondent's facility, including but not limited to, the imposition of civil penalties and recovery of the Department's costs and attorney's fees. The Department does not otherwise intend to convene a public hearing on these matters, but reserves the right to do so at its discretion.

PRE-PAYMENT

Respondent may prepay the administrative penalty of $75,000 and the Department's estimated costs in the amount of $11,250 in the manner described in the attached waiver. By doing so, Respondent waives its right to a hearing and the opportunity to appeal or contest the Assessment which shall become a final Order.

If you have any questions, please contact Paul Foster at (302) 323-4542.

23 June 2009
Date

Collin P. O'Mara, Secretary

cc: Valerie M Satterfield, Deputy Attorney General
James D. Werner, Director
Ali Mirzakhalili, P.E., Program Administrator
Paul Foster, P.E., Program Manager
Bruce Steltzer, Engineer
Ravi Rangan, P.E., Engineer
Dawn Minor, Paralegal
Jenny Bothell, Enforcement Coordinator
Dover File

86-77dcm.doc

WAIVER OF STATUTORY RIGHT TO A HEARING

The Premcor Refining Group Inc. hereby waives its right to a hearing and its opportunity to appeal or contest this Assessment and Order and agrees to the following:

1. **The Premcor Refining Group Inc.** will pay the administrative penalty in the amount of $75,000 by sending a check payable to the "State of Delaware" within 30 days of receipt of this Assessment and Order. The check shall be directed to Valerie M. Satterfield, Deputy Attorney General, Department of Justice, 102 W. Water Street-3rd Floor, Dover, DE 19904; and

2. **The Premcor Refining Group Inc.** will reimburse the Department in the amount of $11,250 which represents the Department's estimated costs. The reimbursement shall be paid within 30 days of receipt of this Assessment and Order. The check shall be made payable to the "State of Delaware" and be directed to Valerie M. Satterfield, Deputy Attorney General, Department of Justice, 102 W. Water Street-3rd Floor, Dover, DE 19904.

The Premcor Refining Group Inc.

Date: _____ By: _____

Title: _____