URC EPA revised

Commonwealth of Pennsylvania Department of Environmental Resources Bureau of Air Quality Control

RACT APPROVAL

PERMIT NUMBER : OP 62-017

Owner:	United Refining Company	Source &	see pg. 5
Address:	Box 780	Air Cleaning	
	Warren, PA 16365	Device	
Attention:	Mr. Thomas Skarada	Location:	Warren
	Director of Refining		Warren County

In accordance with provisions of the Air Pollution Control Act, the Act of January 8, 1960, P. L. 2119, as amended, and with Chapter 127 of the Rules and Regulations of the Department of Environmental Resources, the Department on NOV 1 4 1996 approved plans for achieving compliance by the above indicated air contamination source(s) with the requirements of 25 Pa Code Section 129.91 through 129.95.

The operating permit is subject to the following conditions:

- 1. The facility is to be operated in accordance with the plan submitted with the application as approved herein.
- 2. United Refining shall implement the RACT plan by May 31, 1995, as defined in 25 PA Code Section 129.91. The implementation schedule may be extended only upon the execution and approval of a Consent Decree between United and the Department.
- 3. See attached.

Larry W. Wonders Regional Air Quality Manager

OP 62-017

2

3. The facility shall comply with the following emission limits:

Emission Limit		
0.246 #NOx/MMBTU		
0.246 #NOx/MMBTU		
0.246 #NOx/MMBTU		
0.173 #NOx/MMBTU		
0.14 #NOx/MMBTU		
71 #NOx/1000 barrels FCC feed		
0.14 #NOx/MMBTU (refinery gas)		
0.246 #NOx/MMBTU (refinery oil)		
0.226 #NOx/MMBTU		
0.246 #NOx/MMBTU		
0.137 #NOx/MMBTU		

4. The #4 boiler, crude (WHECO) heater, east and west reformer heaters shall be tested annually by the facility to demonstrate compliance with the emission limits in condition #3. The first annual test shall be completed within 90 days of the issuance of this RACT Permit. Testing shall be done in accordance with the provisions of 5 PA Code Chapter 139 and the following conditions:

A) At least 60 days prior to the test, a test procedure and sketch with dimensions indicating the location of sampling ports and other data to ensure the collection of representative samples shall be submitted to the Department.

B) At least two weeks prior to the test, the Department shall be informed of the date and time of the test.

C) Within 30 days after completion of the test, two copies of the complete test report, including all operating conditions, shall be submitted to the Department for approval.

RACT for the sources in condition #4 shall be an annual tune-up on the combustion process. The emissions of NOx shall be minimized by annual combustion tuning, good operating practices and good air pollution control practices. The annual tune-up shall include, but not be limited to, the following:

- (a) Inspection, adjustment, cleaning or replacement of fuel-burning equipment, including the burners and moving parts necessary for proper operation as specified by the manufacturer.
- (b) Inspection of the flame pattern or characteristics and adjustment necessary to minimize total emissions of NOx.

- (c) Inspection of the air-to-fuel ratio control system and adjustments necessary to ensure proper calibration and operation as specified by the manufacturer.
- (d) Recording all adjustments in a permanently bound log book containing, at a minimum, the following information:
 - (1) The date of the tuning procedure.
 - (2) The name of the service company and technicians.
 - (3) The final operating rate or load.
 - (4) The final NOx emission rates in lb/MMBTU
 - (5) The final excess oxygen rate.
- 5. RACT for the #1 boiler, #2 boiler, #3 boiler, #5 boiler, and the FCC charge heater shall be an annual tune-up on the combustion process. The emissions of NOx shall be minimized by annual combustion tuning, good operating practices and good air pollution control practices. The annual tune-up shall include, but not be limited to, the following:
 - (a) Inspection, adjustment, cleaning or replacement of fuel-burning equipment, including the burners and moving parts necessary for proper operation as specified by the manufacturer.
 - (b) Inspection of the flame pattern or characteristics and adjustments necessary to minimize total emissions of NOx.
 - (c) Inspection of the air-to-fuel ratio control system and adjustments necessary to ensure proper calibration and operation as specified by the manufacturer.
 - (d) Recording all adjustments in a permanently bound log book containing, at a minimum, the following information:
 - (1) The date of the tuning procedure.
 - (2) The name of the service company and technicians.
 - (3) The final operating rate or load.
 - (4) The final CO emission rates in lb/MMBTU
 - (5) The final excess oxygen rate.
- The vacuum heater, prefractionator 2 reboiler, pretreater heater, Sat Gas (Debut) Reboiler, and the DHT2 heater all have heat inputs greater than 20 MMBTU/hr and less than 50 MMBTU/hr and shall comply with 25 PA Code Section 129.93
 (b) (2).The emissions of NOx shall be minimized by annual combustion tuning, good operating practices, and good air pollution control practices.

- The COMBO flare and the FCC flare shall be operated in accordance with 25 PA Code Section 129.93 (c)(4).
- 8. The remaining NOx units are less than 20 MMBTU/hr and shall comply with 25 PA Code Section 129.93 (c)(1).
- The presumptive RACT sources shall be maintained, and operated in accordance with the manufacturers specifications. The sources shall also be operated and maintained in accordance with good air pollution control practices.
- The facility shall comply with the record-keeping requirements of 25 PA Code Section 129.95.

Source boiler #1 boiler #2 boiler #3 boiler #4 boiler #5 FCC regenerator FCC-charge heater

crude (WHECO) heater east reformer heater west reformer heater

Control

not economically feasible not economically feasible