

Department of Environmental Resources  
Bureau of Air Quality Control

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RACT APPROVAL  
REVISED  
PERMIT NUMBER : OP 42-004

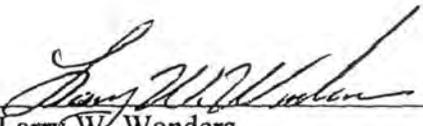
Air Protection Division (3AP21)

Owner:	American Refining Group, Inc.	Source &	see page 5
Address:	77 North Kendall Avenue Bradford, PA 16701	Air Cleaning Device	
Attention:	Mr. Donald R. Hart Jr. Mgr. Safety, Health & Env.	Location:	Bradford McKean Co.

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 **November 23, 1998** 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. The facility shall implement the RACT plan by May 31, 1995.
3. See attached.

  
Larry W. Wonders  
Regional Air Quality Manager

The maximum allowable emissions for the NOx emission sources are as follows (the annual emissions shall be based on a 12 month rolling average, the #/MMBTU emissions shall be based on 30 day rolling average):

NOx emission limits

boiler #3,	0.41 #/MMBTU heat input
boiler #4	0.41 #/MMBTU heat input
boiler #5	0.5 #/MMBTU, 84.5 #/hr

4. The facility shall not burn more than 12,000 gallons of refinery oil per day in boiler #3. The facility shall not burn more than 12,000 gallons of refinery oil per day in boiler #4. Records of the amount of refinery oil shall be maintained by the facility for both #3 and #4 boilers on a daily basis.
5. The facility shall continue the use of Low Excess Air firing on boilers #3 and #4, and shall perform periodic boiler tune-ups on all three boilers as RACT for these sources. 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 and NOx emission rates in lb/MMBTU
    - (5) The final excess oxygen rate.

6. The sources listed in Condition No. 3 above shall be tested at least once every five years except for the combustion units rated greater than 100 MMBTU/hr. The combustion units rated greater than 100 MMBTU/hr shall be stack tested on an annual basis to comply with the requirements of 25 Pa Code Section 129.91 (i). Boiler #5 is subject to 25 PA Code Section 129.91(i). The facility, shall, through the use of either a Department approved periodic source testing program or predictive modeling program, determine the rate of emissions of NOx from the #5 boiler unless the owner and operator elects to use a Department approved continuous monitoring system.
7. Within 30 days of the issuance of the revised RACT Approval, 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 for boilers #3, #4, and #5.
8. Within 60 days of the issuance of the revised RACT Approval, stack tests shall be performed in accordance with the provisions of Chapter 139 to show compliance with the NOx emission limitations in condition #3. The stack tests shall be performed while the sources are operated at the maximum obtainable capacity.
9. At least two weeks prior to the test, the Department shall be informed of the date and time of the test.
10. 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.
11. The Department reserves the right to revise the emission limits established above based on actual emission rates and the emissions during stack testing.
12. The crude unit heater and the platformer heater shall comply with the presumptive NOx RACT standards of 25 PA Code Section 129.93(b).

RACT for the sources in condition #12 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) The facility shall maintain records of all 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        and NOx emission rates in lb/MMBTU
- (5) The final excess oxygen rate.

13. The Extraction Unit Extract Heater, Extraction Unit Raffinate Heater, ROSE Unit Heater, Foster Brook Reactor, Unifiner Heater and the Hirt Burner are all presumptive sources for NOx RACT (less than 20 MMBTU/hr). These units shall be maintained and operated in accordance with manufacturers specifications as required by 25 PA Code Section 129.93(c). The sources shall also be operated and maintained in accordance with good air pollution control practices.

14. The facility shall comply with the record-keeping requirements of 25 PA Code Section 129.95.

15. The facility shall comply with 25 PA Code Section 129.58 pertaining to fugitive VOC sources (LDAR program).

16. This RACT approval applies to the emission of NOx and VOC pollutants only. Emission of other pollutants shall be governed by the existing Plan Approvals, Operating Permits, and applicable Rules and Regulations of the Department. Such approval, permits, and requirements are incorporated herein by reference and made part of this permit.

Source	Control
gasoline loading	vapor recovery unit
storage tanks	vapor pressure < 1.5 psia
oil / water separator	less than 200 gal per day
fugitive equipment leaks	LDAR program
Crude Unit Heater	presumptive
Platformer Heater	presumptive
Unifiner Heater	presumptive
Extraction Unit Extract Heater	presumptive
Extraction Unit Raffinate Heater	presumptive
ROSE Unit Heater	presumptive
Foster Brook Heater	presumptive
Hirt burner	presumptive
boiler #3	boiler tune-ups
boiler #4	boiler tune-ups
boiler #5	boiler tune-ups

