

TENNESSEE AIR POLLUTION CONTROL BOARD
DEPARTMENT OF ENVIRONMENT AND CONSERVATION
NASHVILLE, TENNESSEE 37243-1531



SEP 04 2007

Operating Permit Issued Pursuant to Tennessee Air Quality Act

Date Issued: **AUG 28 2007**

Permit Number:
060782F

Date Expires: May 1, 2017

Issued To:
Colgate-Palmolive Company

Installation Address:
200 Centennial Court
Morristown

Installation Description:
Two (2) 700 hp Boilers
28.6 MMBtu/hr each
Low-NOx Burners as Control

Emission Source Reference No.
32-0238-02
NSPS

The holder of this permit shall comply with the conditions contained in this permit as well as all applicable provisions of the Tennessee Air Pollution Control Regulations.

CONDITIONS:

1. The application that was utilized in the preparation of this permit is dated March 21, 2007 and signed by Alvaro Cantillo, Plant Manager for the permitted facility. If this person terminates employment or is assigned different duties and is no longer the responsible person to represent and bind the facility in environmental permitting affairs, the owner or operator of this air contaminant source shall notify the Technical Secretary of the change. Said notification shall be in writing and submitted within thirty (30) days of the change. The notification shall include the name and title of the new person assigned by the source owner or operator to represent and bind the facility in environmental permitting affairs. All representations, agreement to terms and conditions and covenants made by the former responsible person that were used in the establishment of limiting permit conditions on this permit will continue to be binding on the facility until such time that a revision to this permit is obtained that would change said representations, agreements and covenants.

(conditions continued on next page)

TECHNICAL SECRETARY

No Authority is Granted by this Permit to Operate, Construct, or Maintain any Installation in Violation of any Law, Statute, Code, Ordinance, Rule, or Regulation of the State of Tennessee or any of its Political Subdivisions.

NON-TRANSFERABLE

POST AT INSTALLATION ADDRESS

2. Total stated design capacity of the boilers is 57.2 MMBTU per hour. A construction permit must be obtained before exceeding this capacity. The Technical Secretary may require the permittee to prove compliance with this rate.
3. Natural gas only shall be used as fuel for this source. This limitation is established pursuant to the information contained in the permit application dated March 21, 2007, from the permittee.

The worst case combustion emissions from this source, based on AP-42 factors and on operating 24 hours per day and 365 days per year are:

<u>Pollutant</u>	<u>Pounds per hour</u>	<u>Tons per year</u>	<u>TAPCR</u>
SO ₂	0.04	0.2	1200-3-14-.01(3)
VOC	0.3	1.4	1200-3-6-.03(2)
NO _X	5.4	25.1	1200-3-6-.03(2)
CO	4.5	21.1	1200-3-6-.03(2)

4. Total particulate matter emitted from Boilers 1 and 2 shall not exceed 0.24 pounds per MMBtu as established pursuant to Rule 1200-3-6-.02(2)(a) of the Tennessee Air Pollution Control Regulations.
5. A monthly log of the fuel used by Boilers 1 and 2 shall be maintained at the source location and kept available for inspection by the Technical Secretary or representative. This monthly log shall be kept in the following format or an equivalent, which readily contains the same information. These records shall be retained for a period of not less than two (2) years and made readily available for inspection by the Division. This condition is established pursuant to Rule 1200-3-9-.03(8) of the Tennessee Air Pollution Control Regulations and 40 CFR Part 60 Subpart Dc (NSPS for boilers). All data, including all required calculations, must be entered in the log no later than thirty (30) days from the end of the month for which the data is required.

Monthly Fuel Usage Log Year _____

Month	Operational Boiler (1 or 2)	Natural Gas usage over the last month (10³ cu feet)
January		
February		
March		
April		
May		
June		
July		
August		
September		
October		
November		
December		

(conditions continued on the next page)

6. Visible emissions from this facility shall not exhibit greater than twenty percent (20%) opacity, except for one (1) six-minute period in any one (1) hour period, and for no more than four (4) six-minute periods in any twenty-four (24) hour period. Visible emissions from this source shall be determined by EPA Method 9, as published in the current 40 CFR 60, Appendix A (6 minute average). TAPCR 1200-3-5-.03(6) and TAPCR 1200-3-5-.01(1)
7. Routine maintenance, as required to maintain specified emission limits, shall be performed on the air pollution control devices. Maintenance records shall be recorded in a suitable permanent form and kept available for inspection by the Division. These records shall be retained for a period of not less than two (2) years and made readily available for inspection by the Division.
8. The permittee shall apply for renewal of this permit not less than sixty (60) days prior to the permit expiration date, pursuant to Rule 1200-3-9-.02(3) of the Tennessee Air Pollution Control Regulations.

(end of conditions)

CURRENT EMISSIONS REQUIREMENTS AND EMISSION SUMMARY

1. EMISSION SOURCE REFERENCE NUMBER: 32-0238-02 COMPANY NAME: Colgate-Palmolive Company
 3A. PERMIT STATUS: NEW ☒ RENEWAL ☐ NONATTAINMENT: ☒ ATTAINMENT: ☐ 2. LOG NUMBER: 60782
 3B. PREVIOUS PERMIT NUMBER: CONSTRUCTION: 960780F OPERATING: _____

4. IDENTIFY IF ONLY A PART OF THE SOURCE IS SUBJECT TO THIS REQUIREMENT	5. POLLUTANT	6. APPLICABLE REQUIREMENT(S): TN AIR POLLUTION CONTROL REGULATIONS, 40 CFR, PERMIT RESTRICTIONS, AIR QUALITY BASED STANDARDS	7. LIMITATION	8. MAXIMUM ACTUAL EMISSIONS				9. MAXIMUM ALLOWABLE EMISSIONS	
				IN UNITS OF ITEM 7	POUNDS / HOUR	TONS / YEAR	POUNDS / HOUR	TONS / YEAR	TONS / YEAR
32-0032-02	Particulate (TSP)	1200-3-6-.02(2)(a)			0.4	1.9	13.0		56.9
32-0032-02	SO ₂	1200-3-14-.01(3)			0.04	0.15	0.04		0.15
32-0032-02	CO	1200-3-6-.03(1)			4.5	21.1	4.5		21.1
32-0032-02	VOC	1200-3-6-.03(1)			0.3	1.4	0.3		1.4
32-0032-02	NO _x	1200-3-6-.03(1)			5.7	25.1	5.7		25.1
32-0238-02	Opacity	1200-3-5-.01(1) 1200-3-5-.03(6)	20% EPA Method 9						

SOURCE OF DATA FOR EMISSIONS IN ITEM 8: Data was taken from previous permit number 960780F.

IF THIS IS NOT A TITLE V SOURCE, IS THIS A DEFERRED SOURCE (SUBJECT TO NSPS OR NESHAAPS) OR A SYNTHETIC MINOR SOURCE? Yes

ENGINEERING SPECIALIST: TSB SUPERVISOR: 8124107 DATE: August 8, 2007

Calculations 32-0238

Condition 2

Boiler rating each <u>MMBTU</u> hr	# of boilers		Total <u>MMBTU</u> hr
28.6	2	=	57.2

AP42 Tables 1.4-1 & 1.4-2

Condition 3

Pollutant	2 Boilers	emission factor	conversion	Allowable	Max Operating	Allowable
	<u>MMBTU</u> hr	<u>lb</u> scf	<u>MMBTU</u> scf	<u>lb</u> hr	<u>hr</u> yr	<u>tons</u> yr
TSP	57.2	0.0000076	0.00102	0.4	8760	1.9
SO ₂	57.2	0.0000006	0.00102	0.03	8760	0.15
CO	57.2	0.000084	0.00102	4.7	8760	20.6
NO _x	57.2	0.0001	0.00102	5.6	8760	24.6
VOC	57.2	0.0000055	0.00102	0.3	8760	1.4

Notes: If my numbers were close, I used J. Martin's #s from construction permit. DAL
Calculations based on 1000 BTU/scf.
The TSP emission factor includes filterable and condensable particulate matter.

Condition 4

TAPCR 1200-3-6-.02(2)(a)

maximum allowable particulate emissions

$$E = 0.6 (10/Q)^{0.5566}$$

where Q is MMBTU/hr

where E is lb/MMBTU

$$E = 0.22729 \text{ lbs/MMBTU}$$

$$E = 0.23 \text{ lbs/MMBTU}$$

<u>MMBTU</u> hr	<u>lbs</u> MMBTU	=	<u>lbs</u> hr	
57.2	0.22729		13.00	
<u>hr</u> yr	<u>lbs</u> hr	=	<u>lbs</u> yr	<u>tons</u> yr
8760	13.00		113889	56.94