

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



Permit to Construct or Modify an Air Contaminant Source Issued Pursuant to Tennessee Air Quality Act

Date Issued: JAN 16 2008

Permit Number:
961502P

Date Expires: January 1, 2009

Issued To:
Colgate-Palmolive Company

Installation Address:
200 Centennial Court
Morristown

Installation Description:
Storage Silo with Fabric Filter Control

Emission Source Reference No.
32-0238-04

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 November 13, 2007, and signed by Mr. Alvaro Cantillo, Plant Manager of the permitted facility. If this person terminates employment or is reassigned 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. The maximum input rate for this source shall not exceed 34,000 pounds per hour. The Technical Secretary may require the permittee to prove compliance with this rate.
3. Particulate matter (TSP) emitted from this source shall not exceed 0.25 grain per dry standard cubic foot (1.29 pound per hour). This emission limitation is established pursuant to Rule 1200-3-7-.04(2) of the Tennessee Air Pollution Control Regulations.
4. Fugitive emissions from this source shall be controlled as specified in Rule 1200-3-8-.01. Specifically, no person shall cause, suffer, allow, or permit fugitive dust to be emitted in such manner to exceed five (5) minutes per hour or twenty (20) minutes per day as to produce a visible emission beyond the property line of the property on which the emission originates, excluding malfunction of equipment as provided in Chapter 1200-3-20. Fugitive emissions from this source shall be determined by Tennessee Visible Emissions Evaluation Method 4 as adopted by the Tennessee Air Pollution Control Board on April 16, 1986.
5. Visible emissions from this source 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 (six-minute average). TAPCR 1200-3-5-.03(6) and TAPCR 1200-3-5-.01(1)
6. Upon the malfunction/failure of any emission control device(s) serving this source, the operation of the process(es) served by the device(s) shall be regulated by Chapter 1200-3-20 of the Tennessee Air Pollution Control Regulations.
7. Routine maintenance, as required to maintain specified emission limits, shall be performed on the air pollution control device(s). Maintenance records shall be recorded in a suitable permanent form and kept available for inspection by the Division. These records must be retained for a period of not less than two years.
8. This permit shall serve as a temporary operating permit from initial start-up to the receipt of a standard operating permit (regardless of the expiration date), provided the operating permit is applied for within thirty (30) days of initial start-up and the conditions of this permit and any applicable emission standards are met.

(conditions continued on next page)

9. The permittee shall certify the start-up date of the air contaminant source regulated by this permit by submitting

A COPY OF ALL PAGES OF THIS PERMIT, with the information required in A) and B) of this condition completed, to the Technical Secretary's representatives listed below:

A) DATE OF START-UP: _____ / _____ / _____
month day year

B) Anticipated operating rate: _____ percent of maximum rated capacity

For the purpose of complying with this condition, "start-up" of the air contaminant source shall be the date of the setting in operation of the source for the production of product for sale or use as raw materials or steam or heat production.

The undersigned represents that he/she has the full authority to represent and bind the permittee in environmental permitting affairs. The undersigned further represents that the above provided information is true to the best of his/her knowledge and belief.

Signature		Date
Signer's name (type or print)	Title	Phone (with area code)

Note: This certification is not an application for an operating permit. At a minimum, the appropriate application form(s) must be submitted requesting an operating permit. The application must be submitted in accordance with the requirements of this permit.

The completed certification shall be delivered to East Tennessee Permit Program and the Environmental Field Office at the addresses listed below no later than thirty (30) days after the air contaminant source is started-up.

East Tennessee Permit Program
Division of Air Pollution Control
9th Floor, L & C Annex
401 Church Street
Nashville, TN 37243-1531

Knoxville Environmental Field Office
Division of Air Pollution Control
3711 Middlebrook Pike
Knoxville, TN 37921-6538

(end of conditions)

Emission Summary

Permit Number: 961502P

Source Status: New ☒ Modification ☐ Expansion ☐ Relocation ☐ **Permit Status:** New ☒ Renewal ☐

PSD ☐ NSPS ☐ NESHAPs ☐ **Previous Permit Number:** Construction _____ Operating _____

	Pounds/Hour			Tons/Year				Date of Data	*	Applicable Standard 1200-3-
	Actual	Potential	Allowable	Actual	Potential	Allowable	Net Change			
TSP	0.15	1.29	1.29	0.66	5.63	5.63	+5.63	11/13/07		7-.04(2)
SO ₂										
CO										
VOC										
NO _x										
HAPs										

- - Source of data

PERMITTING PROGRAM: HLC DATE: 1/7/2007

Colgate-Palmolive Company

Pmt Appl Dates: 11/13/07
Construction of Sylodent 783 storage silo with fabric control on conveying equipment (To be installed)

Log No.: 61502
Company #: 32-0238-04

CALCULATIONS SUMMARY - Rotary Calciner

	Pounds/Hour			Tons/Year			Net Change
	Actual	Potential	Allowable	Actual	Potential	Allowable	
TSP	0.15	3.00	1.29	0.17	3.48	5.63	

INPUT

Actual Oper Hrs = **2319**
Allowbl Oper Hrs = **8760**
Potential Oper Hrs = **8760**

Fuel : Natural gas

ALLOWABLES:
ALLOWABLES:
ALLOWABLES:
TSP

$E_1 = (0.02 \text{ gr/dscf}) * (\text{flowrate dscf/min}) * (60 \text{ min/hr}) * (1 \text{ lb}/7000 \text{ gr})$ 1200-3-7-.04(1)
 $E_2 = (0.25 \text{ gr/dscf}) * (\text{flowrate dscf/min}) * (60 \text{ min/hr}) * (1 \text{ lb}/7000 \text{ gr})$ 1200-3-7-.04(2)
 $E_3 = 3.59 * P^{0.62}$ based on T.A.P.C.R. 1200-3-7-.03(1) for $P < 30 \text{ T/Hr}$ 1200-3-7-.04(3)
 P = Process weight rate in tons/hr; E = emissions in pounds/hour

Flowrate = **600 dscf/min**

Process weight rate = 34,000 lbs/hr = 34,000 lbs/hr * 1 ton/2000 lbs = **17 tons/hour**

$E_1 (0.02 \text{ gr/dscf}) = 0.10 \text{ lb/hr}$ or 0.45 tpy
 $E_2 (0.25 \text{ gr/dscf}) = 1.29 \text{ lb/hr}$ or 5.63 tpy
 $E_3 = 20.80 \text{ lb/hr}$ or 91.09 tpy
 $E_3 = 3.59 * P^{0.62}$ (for P less than 30 tons/hr)

TSP Actuals = Controlled Potential

Operating Hours 24 hr/day * 365 day/year = 8760.00 hr/yr

He's limited by 2319 hours/year. He could never run at 8760 hours/year.

$0.15 \text{ lb/hr} * 2319 \text{ hr/yr} * 1 \text{ ton} / 2000 \text{ lb} = 0.17 \text{ tpy}$
 $0.15 \text{ lb/hr} \longrightarrow (0.17 * 2000 / 2319)$

If $E_3 > 0.25$, select E_2

If $E_3 < 0.20$, select E_1

Potential Emissions = Uncontrolled Potential

$0.15 \text{ lbs/hr} * [1 / (1 - 0.95)] = 3 \text{ lbs/hr}$
 $3.48 \text{ tpy} < 5 \text{ tpy}$, so this is insignificant $\longrightarrow (3 * 2319 / 2000)$

He's limited by 2319 hours/year. He could never run at 8760 hours/year.

