



**STATE OF TENNESSEE
AIR POLLUTION CONTROL BOARD
DEPARTMENT OF ENVIRONMENT AND CONSERVATION
NASHVILLE, TENNESSEE**

PERMIT TO OPERATE AIR CONTAMINANT SOURCE(S)

Permit Number: 078917

Facility (Permittee): Colgate-Palmolive Company

Facility ID: 32-0238

Facility Address: 200 Centennial Court, Morristown
Hamblen County

Facility Classification: True Minor

Federal Requirements: 40 CFR 60, Subpart Dc
40 CFR 60, Subpart IIII
40 CFR 63, Subpart ZZZZ

Facility Description: Dental Cream Manufacturing Facility

Operating Permit 078917, consisting of 27 pages is hereby issued November 18, 2021 pursuant to the Tennessee Air Quality Act and by the Technical Secretary, Tennessee Air Pollution Control Board, Department of Environment and Conservation. This permit supersedes all previously issued permits for this/these source(s). This permit expires on May 1, 2031. 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 (TAPCR).

Michelle W. Owenby
Technical Secretary
Tennessee Air Pollution Control Board

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.

Section I – Sources Included in this Operating Permit

FACILITY DESCRIPTION			
Source Number	Source Description	Status	Control Device/Equipment
02	Two 700HP Natural Gas-Fired Boilers	Existing	Low NOx Burners
04	Sylodent Storage Silo	Existing	Fabric Filter Control
05	Emergency Diesel Generator	Existing	None
08	Weighing Tote Dump Station	New	Dust Collector

Section II – Permit Record

Permit Type	Description of Permit Action	Issue Date
Initial	Initial operating permit issuance	11/18/2021

Section III - General Permit Conditions

G1. Responsible Person

The applications that were utilized in the preparation of this operating permit are dated April 22, 2021 (signed by Douglas Dils, Plant Manager and current Responsible Official for the permitted facility); July 6, 2020 (signed by Douglas Dils, Plant Manager); March 2, 2017 (signed by Daniel Braidatto, Director of Manufacturing); March 21, 2007 (signed by Alvaro Cantillo, Plant Manager); and November 13, 2007 (signed by Alvaro Cantillo, Plant Manager), the Responsible Person(s) for the permittee on the date the applications were received. The Responsible Person may be the owner, president, vice-president, general partner, plant manager, environmental/health/safety coordinator, or other person that is able to represent and bind the facility in environmental permitting affairs. If this Responsible Person (Douglas Dils) terminates their employment or is assigned different duties and is no longer the person to represent and bind the permittee in environmental permitting affairs, the new Responsible Person for the permittee shall notify the Technical Secretary of the change in writing. The Notification shall include the name and title of the new Responsible Person assigned by the permittee to represent and bind the permittee in environmental permitting affairs, and the date the new Responsible Person was assigned these duties.

Should a change in the Responsible Person occur, the new Responsible Person must submit the Notification provided in **Appendix 1** of this permit no later than 30 days after being assigned as the Responsible Person. A separate notification shall be submitted for each subsequent change in Responsible Person.

TAPCR 1200-03-09-.03(8)

G2. Application and Agreement Letters

This source shall operate in accordance with the terms of this permit, the information submitted in the approved permit application referenced in **Condition G1**, and any documented agreements made with the Technical Secretary.

TAPCR 1200-03-09-.01(1)(d)

G3. Submittals

Unless otherwise specified within this permit, the permittee shall submit all applicable plans, checklists, certifications, notifications, test protocols, reports, applications, and fees to the attention of the following Division Programs at the addresses indicated in the table below:

Permitting Program	Compliance Validation Program	Field Services Program
<ul style="list-style-type: none">• Notifications• Startup certifications• Applications• NSPS reports• MACT/GACT/NESHAP reports• Fees• Emission Statements	<ul style="list-style-type: none">• Test protocols• Emission test reports• Visible emission evaluation reports	<ul style="list-style-type: none">• Semiannual reports• Annual compliance certifications
Division of Air Pollution Control William R. Snodgrass TN Tower, 15 th Floor 312 Rosa L. Parks Avenue Nashville, TN 37243 Air.Pollution.Control@tn.gov		Knoxville Environmental Field Office Division of Air Pollution Control 3711 Middlebrook Pike Knoxville, TN 37921 APC.KnoxEFO@tn.gov

The permittee shall submit the information identified above as requested in this permit. In lieu of submitting this information to the mailing addresses above, the permittee may submit the information to the attention of the respective Division Programs via e-mail in Adobe Portable Document format (PDF) to the specified email address.

TAPCR 1200-03-09-.03(8)

G4. Notification of changes

The permittee shall notify the Technical Secretary for any of the following changes to a permitted air contaminant source which would not be a modification requiring a new construction permit:

- change in air pollution control equipment that does not result in an increase or otherwise meet the definition of a modification
- change in stack height or diameter
- change in exit velocity of more than 25 percent or exit temperature of more than 15 percent based on absolute temperature.

The permittee must submit the Notification provided in **Appendix 2** of this permit 30 days before the change is commenced.

TAPCR 1200-03-09-.02(7)

G5. Permit Transference

- A. This permit is not transferable from one air contaminant source to another air contaminant source or from one location to another location. The permittee must submit a construction permit application for a new source to the Permitting Program not less than 90 days prior to the estimated starting date of these events. If the new source will be subject to major New Source Review, the application must be submitted not less than 120 days in advance of the estimated starting date of these events.

TAPCR 1200-03-09-.03(6)(b) and 1200-03-09-.01(1)(b)

- B. In the event an ownership change occurs at this facility, the new owner must submit the notification provided in **Appendix 3** of this permit. The written notification must be submitted by the new owner to the Permitting Program no later than 30 days after the ownership change occurs. If the change in ownership results in a change in Responsible Person for the facility, notification of the change in Responsible Person must also be submitted, as specified in **Condition G1**.

TAPCR 1200-03-09-.03(6)(a) and (b)

G6. Operating Permit Application Submittal

- A. The permittee shall apply for an operating permit renewal not less than 60 days prior to the permit's expiration date.

TAPCR 1200-03-09-.02(3)(a)

- B. Operation of each air contaminant source shall be in accordance with the provisions and stipulations set forth in this permit, all provisions of the Tennessee Division of Air Pollution Control Regulations, and all provisions of the Tennessee Air Quality Act.

TAPCR 1200-03-09-.02(6)

G7. Fees

The air contaminant source(s) identified in this permit shall comply with the requirements for payment of applicable annual emission fees to the Tennessee Division of Air Pollution Control based on the Administrative Fees Schedule I provided in **Appendix 4** of this permit. The fee must be paid to the Division in full by the first day of the month that the fee is due (determined from **Appendix 4**). (Note: not all facilities are required to pay annual emission fees)

TAPCR 1200-03-26-.02

G8. General Recordkeeping Requirements

- A. All recordkeeping requirements for all data required to be recorded shall follow the following schedules:

For Daily Recordkeeping	For Weekly Recordkeeping	For Monthly Recordkeeping
No later than seven days from the end of the day for which the data is required.	No later than seven days from the end of the week for which the data is required.	No later than 30 days from the end of the month for which the data is required.

- B. The information contained in logs, records, and submittals required by this permit shall be kept at the facility's address, unless otherwise noted, and provided to the Technical Secretary or a Division representative upon request. Computer-generated logs are acceptable. Compliance is assured by retaining the logs, records, and submittals specified in this permit for a period of not less than five years at the facility's address.

TAPCR 1200-03-10-.02(2)(a)

G9. Routine Maintenance Requirements

The permittee shall maintain and repair the emission source, associated air pollution control device(s), and compliance assurance monitoring equipment as required to maintain and assure compliance with the specified emission limits.

TAPCR 1200-03-09-.03(8)

Compliance Method: Records of all repair and maintenance activities required above 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 five years. The date each maintenance and repair activity began shall be entered in the log no later than seven days following the start of the repair or maintenance activity, and the completion date shall be entered in the log no later than seven days after activity completion.

G10. Visible and Fugitive Emissions

- A. Unless otherwise specified, visible emissions from this facility shall not exhibit greater than 20% opacity, except for one six-minute period in any one hour period, and for no more than four six-minute periods in any 24 hour period. A stack is defined as any chimney, flue, conduit, exhaust, vent, or opening of any kind whatsoever, capable of, or used for, the emission of air contaminants.

TAPCR 1200-03-05-.01(1) and 1200-03-05-.03(6)

Compliance Method: When required to demonstrate compliance, visible emissions shall be determined by EPA Method 9, as published in the current 40 CFR 60, Appendix A (six-minute average).

- B. The permittee shall not cause, suffer, allow, or permit any materials to be handled, transported, or stored; or a building, its appurtenances, or a road to be used, constructed, altered, repaired, or demolished without taking reasonable precautions to prevent particulate matter from becoming airborne. Reasonable precautions shall include, but are not limited to, the following:
- (a) Use, where possible, of water or chemicals for control of dust in demolition of existing buildings or structures, construction operations, grading of roads, or the clearing of land;
 - (b) Application of asphalt, water, or suitable chemicals on dirt roads, material stock piles, and other surfaces which can create airborne dusts;
 - (c) Installation and use of hoods, fans, and fabric filters to enclose and vent the handling of dusty materials. Adequate containment methods shall be employed during sandblasting or other similar operations.

The permittee shall not cause, suffer, allow, or permit fugitive dust to be emitted in such manner to exceed five minutes per hour or 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 TAPCR 1200-03-20. A malfunction is defined as, any sudden and unavoidable failure of process equipment or for a process to operate in an abnormal and unusual manner. Failures that are caused by poor maintenance, careless operation, or any other preventable upset condition or preventable equipment breakdown shall not be considered malfunctions.

TAPCR 1200-03-08-.01(1) and 1200-03-08-.01(2)

Compliance Method: When required to demonstrate compliance, fugitive emissions shall be determined by Tennessee Visible Emissions Evaluation Method 4 as adopted by the Tennessee Air Pollution Control Board on April 16, 1986.

C. Fugitive emissions from roads and parking areas shall not exhibit greater than 10% opacity.

TAPCR 1200-03-08-.03

Compliance Method: When required to demonstrate compliance, fugitive emissions from roads and parking areas shall be determined by utilizing Tennessee Visible Emissions Evaluation (TVEE) Method 1, as adopted by the Tennessee Air Pollution Control Board on April 29, 1982, as amended on September 15, 1982 and August 24, 1984.

G11. Facility-wide Limitations

Not applicable.

G12. NSPS/NESHAP/MACT/GACT Standards

The following source(s) shall comply with all applicable requirements of the NSPS/NESHAP/MACT/GACT standards as indicated in the table below:

Source	NESHAP/MACT/GACT	NSPS
02	Not Applicable	40 CFR 60, Subpart Dc
04	Not Applicable	Not Applicable
05	40 CFR 63, Subpart ZZZZ	40 CFR 60, Subpart IIII
08	Not Applicable	Not Applicable

TAPCR 1200-03-09-.03(8)

Compliance Method: Compliance methods are provided in the source-specific conditions in **Section V** of this permit. Source 05 is an insignificant diesel-fired emergency engine and is therefore not listed on this permit. However, the NSPS and MACT requirements for this engine are addressed in **Condition F1-2** of this permit.

G13. VOC and NO_x Emission Statement

Not Applicable.

G14. Source Testing Requirements

Not Applicable.

Section IV – Federal and/or State Only Requirements

F1-1. At the time of application, the potential to emit hazardous air pollutants from this facility was less than the major source applicability thresholds of 10 tons per year of a single hazardous air pollutant and less than 25 tons per year of a combination of hazardous air pollutants. The permittee must apply for and receive a construction permit in accordance with the procedures in Chapter 1200-03-09 of the Tennessee Air Pollution Control Regulations (TAPCR) prior to making any changes such that the potential to emit hazardous air pollutants from the facility will exceed these thresholds.

TAPCR 1200-03-09-.03(8)

F1-2. Internal Combustion Engines

- A. All stationary reciprocating internal combustion engines, including engines deemed insignificant activities and insignificant emission units, shall comply with the applicable provisions of TAPCR 0400-30-38-.01.
- B. All stationary compression ignition internal combustion engines, including engines deemed insignificant activities and insignificant emission units, shall comply with the applicable provisions of TAPCR 0400-30-39-.01.
- C. All stationary spark ignition internal combustion engines, including engines deemed insignificant activities and insignificant emission units, shall comply with the applicable provisions of TAPCR 0400-30-39-.02.

TAPCR 1200-03-09-.03(8) and TAPCR 0400-30-38 and 39

Section V - Source Specific Permit Conditions

Source No	Source Description
02	Two 700HP Natural Gas-Fired Boilers

S1-1. Input Limitation(s) or Statement(s) of Design

- A. The design heat input rate of the boilers is 28.6 MMBTU/hr for each boiler, for a total of 57.2 MMBTU/hr. Should the permittee need to modify the boilers in a manner that increases the design heat input rate, a construction permit shall be applied for and received in accordance with TAPCR 1200-03-09-.01 prior to making the change.

TAPCR 1200-03-09-.03(8) and the application dated March 2, 2017 from the permittee.

Compliance Method: The permittee shall maintain documentation to demonstrate the heat input rate for the boilers. Documentation shall include, but is not limited to, manufacturer's specifications, purchase records, operating manuals, or a tag affixed to the unit by the manufacturer. These documents shall be kept readily available/accessible and made available upon request by the Technical Secretary or a Division representative.

- B. Only natural gas shall be used as fuel for the boilers. The boilers are only capable of burning this fuel. Should the permittee need to modify the boilers to allow the use of a fuel other than natural gas, a construction permit shall first be applied for and received in accordance with TAPCR 1200-03-09.01 prior to making the change.

TAPCR 1200-03-09-.03(8) and the application dated March 21, 2007 from the permittee.

Compliance Method: Compliance with this condition shall be demonstrated through recordkeeping as required by **Condition S1-6** of this permit.

S1-2. Production Limitation(s)

Not Applicable.

S1-3. Operating Hour Limitation(s)

Not Applicable.

S1-4. Emission Limitation(s)

- A. The combustion emissions from this source are based on AP-42 factors and assume operation 24 hours per day and 365 days per year.

Pollutant	Pounds per hour	Tons per year	TAPCR	Emission Factor
SO ₂	0.04	0.15	1200-03-14-.01(3)	0.6 lb/10 ⁶ scf
VOC	0.3	1.4	1200-03-06-.03(2)	5.5 lb/10 ⁶ scf
NO _x	2.9	12.6	1200-03-06-.03(2)	50 lb/10 ⁶ scf
CO	4.5	21.1	1200-03-06-.03(2)	84 lb/10 ⁶ scf

Compliance Method: Compliance with these emissions is assured by compliance with **Conditions S1-1A** (heat input rate), **S1-1B** (fuel type), and the emission factors from AP-42, Chapter 1, Table 1.4-1,2 in this condition. The boilers shall be equipped with low NO_x burners to control emissions of Nitrogen Oxides (each boiler). Documentation from the manufacturer for these units which specifies that these features are present, and which also provides NO_x emission factors, shall be retained in accordance with **Condition G8**.

- B. Particulate matter (PM) emitted from this source shall not exceed 0.23 pounds per MMBTU (lbs/MMBTU) and 13.2 pounds per hour (lbs/hr) on a daily average basis.

TAPCR 1200-03-06-.02(2)(a) and the agreement letter dated November 6, 2021 (**Appendix 6**).

Compliance Method: Compliance with these emission limitations is assured by compliance with **Conditions S1-1A** (heat input rate), **S1-1B** (fuel type), and the emission factor of 7.6 lb/10⁶ scf from AP-42, Chapter 1, Table 1.4-2.

S1-5. Source-Specific Visible Emissions Limitation(s)

Not applicable.

S1-6. Recordkeeping Requirements

Pursuant to 40 CFR §60.48c (g)(2), the permittee shall record and maintain records of the amount of fuel combusted by the boilers during each calendar month. The permittee is subject to and must comply with the General Provisions identified in **Appendix 8** that apply to 40 CFR part 60, Subpart Dc.

TAPCR 1200-03-09-.03(8) and the application dated March 2, 2017 from the permittee.

Compliance Method: The permittee shall record the actual quantity of natural gas used per month by the boilers in a log with the format in **Appendix 7** or alternative format which provides the same information. The log shall be retained in accordance with **Condition G8**.

Source No	Source Description
04	Syloid Storage Silo with Fabric Filter

S2-1. Input Limitation(s) or Statement(s) of Design

The maximum material input rate for the silo shall not exceed 34,000 pounds per hour (lbs/hr) on a daily average basis. Should the permittee need to modify the source in a manner that increases the maximum material input rate, a construction permit shall be applied for and received in accordance with TAPCR 1200-03-09-.01 prior to making the change.

TAPCR 1200-03-09-.03(8) and the application dated March 2, 2017 from the permittee.

Compliance Method: The permittee shall maintain a daily log of the actual amount of material input and the hours of operation in a log with the format in **Appendix 7** or alternative format which provides the same information. The log shall be retained in accordance with **Condition G8**.

S2-2. Production Limitation(s)

Not Applicable.

S2-3. Operating Hour Limitation(s)

Not Applicable.

S2-4. Emission Limitation(s)

Particulate matter (PM) emitted from this source shall not exceed 0.25 grains per dry standard cubic foot (gr/dscf) of exhaust gas (1.29 pounds per hour (lbs/hr)).

TAPCR 1200-03-07-.04(2)

Compliance Method: The permittee shall operate and maintain a fabric filter to control PM emissions. The source controlled by the fabric filter shall not operate unless the control device is in operation. The permittee shall perform and record weekly visual inspections of the exterior of the fabric filter and any ductwork, including the exhaust. The permittee shall initiate, as well as record, corrective action within 24 hours and complete, as well as record, corrective action as expeditiously as practical if the permittee finds that a problem has developed during an inspection of the fabric filter. Identification of an abrasion hole and/or emissions problem and/or plugging problem and corrective action(s) shall be noted in the weekly inspection records. Inspection records with the format in **Appendix 7** or alternative format which provides the same information shall be kept and shall include the initials of the person performing the inspection(s) and corrective action(s), along with the date, time, and any relevant comments. Days that the source is not in operation shall be noted. These records shall be retained in accordance with **Condition G8**.

TAPCR 1200-03-09-.03(8) and 1200-03-10-.02(2)(a)

S2-5. Source-Specific Visible Emissions Limitation(s)

Not applicable.

Source No	Source Description
08	Weighing Tote Dump Station with Dust Collector

S3-1. Input Limitation(s) or Statement(s) of Design

The stated design input capacity for the weighing tote dump station is 900 pounds per hour (lbs/hr) of charcoal. Should the permittee need to modify the source in a manner that increases the design input capacity, a construction permit shall be applied for and received in accordance with TAPCR 1200-03-09-.01 prior to making the change.

TAPCR 1200-03-09-.03(8) and the application dated July 6, 2020 from the permittee.

Compliance Method: The permittee has certified the design input capacity of the tote in the cover letter dated June 22, 2020 (**Appendix 6**), contained in the permit application dated July 6, 2020.

S3-2. Production Limitation(s)

Not Applicable.

S3-3. Operating Hour Limitation(s)

Not Applicable.

S3-4. Emission Limitation(s)

Particulate matter (PM) emitted from this source shall not exceed 2.19 pounds per hour (lbs/hr) on a daily average basis (9.59 tons per year).

TAPCR 1200-03-07-.03(1)

Compliance Method: The permittee shall comply with the PM emission limitation as follows:

- (1) Install and operate a pressure gauge to measure the pressure drop (inches of water) across the fabric filter(s) / baghouse(s). The permittee shall compile 30 consecutive operating days of pressure drop readings across the fabric filter(s) / baghouse(s). The designated person(s) shall note any relevant baghouse conditions/problems/concerns when recording the values. The records shall also include the initials of the person performing the pressure drop reading, any corrective action(s), along with the date, time, and any relevant comments. Days that the source is not in operation shall be noted.
- (2) Submit the pressure drop data, including a “proposed” minimum pressure drop value, to the Division’s Permitting Program (see **Condition G3**) no later than 15 days after completion of the initial 30 consecutive operating days of pressure drop readings. This submittal shall include an operating permit amendment application to have the “proposed” minimum pressure drop value incorporated into this permit.
- (3) Assure continued compliance by maintaining the “approved” minimum pressure drop across each baghouse, recording one pressure drop reading per day while the source is in operation; conducting visual inspections of the exterior of the baghouse and the baghouse ductwork, including the baghouse exhaust; and maintaining the log with the format in **Appendix 7** or alternative format which provides the same information. If the permittee finds that a sub-minimum pressure drop, abrasion hole, emissions problem, or plugging problem has developed during an inspection of the baghouse(s), the permittee shall initiate corrective action within 24 hours and

complete corrective action as expediently as practical. The permittee shall record all corrective action taken including the initiation and completion of all corrective actions in the log.

- (4) For lower pressure drop reading(s) resulting from replacement of bags, the permittee shall record the deviation(s) in the log. Due allowance will be made for lower pressure drop reading(s) which follow replacement of bags provided the permittee establishes to the satisfaction of the Technical Secretary that these lower readings resulted from the replacement of bags.
- (5) In summary, the log shall include the initials of the person performing the pressure drop reading and inspection, any corrective action(s)/deviation(s), along with the date, time, and any relevant comments. Days that the source is not in operation shall be noted. These records shall be retained in accordance with **Condition G8**.

TAPCR 1200-03-09-.03(8)

S3-5. Source-Specific Visible Emissions Limitation(s)

Not applicable.

(end of conditions)

The permit application gives the location of this source as 36°10'39" Latitude and -83°22'20" Longitude.

Appendix 1: Notification of Change in Responsible Person

Facility (Permittee) Colgate-Palmolive Company

Facility ID 32-0238

Former Responsible Person

<u>Name</u>	<u>Title</u>
-------------	--------------

New Responsible Person

<u>Name</u>	<u>Title</u>
<u></u>	
<u></u>	
<u>Email</u>	

Date New Responsible Person was assigned this duty:

As the Responsible Person of the above mentioned facility (permittee), I certify that the information contained in this Notification is accurate and true to the best of my knowledge. As specified in Tennessee Code Annotated Section 39-16-702(a)(4), this declaration is made under penalty of perjury.

<u>Signature</u>		<u>Date</u>
<u>Signer's name (print)</u>	<u>Title</u>	<u>Phone (with area code)</u>

Appendix 2: Notification of Changes

Facility (Permittee) Colgate-Palmolive Company

Facility ID 32-0238

Source No.

	Control Equipment	Stack Height (Feet)	Stack Diameter (Feet)	Exit Velocity (Feet/Second)	Exit Temperature (°F)
Current					
Proposed					
Current					
Proposed					
Current					
Proposed					

Comments:

As the Responsible Person of the above mentioned facility (permittee), I certify that the information contained in this Notification is accurate and true to the best of my knowledge. As specified in Tennessee Code Annotated Section 39-16-702(a)(4), this declaration is made under penalty of perjury.

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

Appendix 3: Notification of Ownership Change

Facility (Permittee) Colgate-Palmolive Company (Previous Owner)

Facility ID 32-0238

Facility (Permittee) _____ (New Owner)

Email Address _____

Secretary of State Control Number _____ [as registered with the TN Secretary of State]

Date of Ownership Change _____

Comments:

As the responsible person for the new owner or operator of the above mentioned facility (permittee):

- I agree to not make any changes to the stationary source(s) that meet the definition of modification as defined in Division 1200-03 or Division 0400-30¹, and
- I agree to comply with the conditions contained in **the permits listed below**, Division 1200-03 and Division 0400-30 of the Tennessee Air Pollution Control Regulations, the Tennessee Air Quality Act, and any documented agreements made by the previous owner to the Technical Secretary.

List all active permits issued to the facility for which the owner wishes to assume ownership:

As the Responsible Person of the above mentioned facility (permittee), I certify that the information contained in this Notification is accurate and true to the best of my knowledge. As specified in Tennessee Code Annotated Section 39-16-702(a)(4), this declaration is made under penalty of perjury.

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

¹ Appropriate application forms must be submitted prior to modification of the stationary source(s).

Appendix 4: Fees

All minor and conditional major source annual emission fees are due and payable to the Division in full according to SCHEDULE I below² unless otherwise specified in TAPCR 1200-03-26-.02(6)(c). The county that a source is located in determines when the minor source annual emission fee is due. Fees are due the first day of the month listed. If a source is located on contiguous property in more than one county, the county appearing earliest in the calendar year shall be used to determine the due date of the annual emission fee.

SCHEDULE I Month the Annual Emissions Fee is Due (Accounting Period) Counties in the Monthly Grouping

January	Anderson, Bedford, Benton, Bledsoe, Blount, Bradley and Campbell
February	Cannon, Carroll, Carter, Cheatham, Chester, Claiborne, Clay and Cocke
March	Coffee, Crockett, Cumberland, Davidson, Decatur, DeKalb, Dickson, Dyer and Fayette
April	Fentress, Franklin, Gibson, Giles, Grainger, Greene and Grundy
May	Hamblen, Hamilton, Hancock, Hardeman, Hardin, Hawkins, Haywood and Henderson
June	Henry, Hickman, Houston, Humphreys, Jackson, Jefferson, Johnson, Knox, Lake, Lauderdale, Lawrence and Lewis
July	Lincoln, Loudon, McMinn, McNairy, Macon and Madison
August	Marion, Marshall, Maury, Meigs, Monroe, Montgomery, Moore and Morgan
September	Obion, Overton, Perry, Pickett, Polk, Putnam and Rhea
October	Roane, Robertson, Rutherford, Scott, Sequatchie, Sevier, and Shelby
November	Smith, Stewart, Sullivan, Sumner, Tipton, Trousdale, Unicoi and Union
December	Van Buren, Warren, Washington, Wayne, Weakley, White, Williamson and Wilson

² Note that some sources with allowable emissions below specific thresholds are not subject to the requirement to pay annual emission fees. Contact the Emission Inventory Program at apc.inventory@tn.gov if you have any questions.

Appendix 5: Emission Statement for VOC and NO_x

Not applicable.

Appendix 6: Agreement and Certification Letters



COLGATE-PALMOLIVE COMPANY

11/5/2021

Tennessee Department of Environment and Conservation
Division of Air Pollution Control
William R. Snodgrass Tennessee Tower, 15th Floor 312 Rosa L.
Parks Avenue
Nashville, TN 37243

RE: Permit Agreement Letter
Colgate-Palmolive Company
200 Centennial Court, Morristown
Emission Source Reference No. 32-0238-02 / Permit No. 078917

APC RCVD

11/21 AM 9:41

Dear Ms. Owenby:

On behalf of Colgate Palmolive Company, the following permit limitations are agreed upon for the dental cream manufacturing operations located at the above referenced facility in order for the facility to reduce allowable emissions and potential fees:

- SO₂ emissions from Source 02, two 700HP natural gas-fired boilers, shall not exceed 0.04 pounds/hour or 0.15 tons/year.
Colgate Palmolive shall demonstrate compliance with this emission limitation by operating the boilers without modifications that would increase the heat input rate and only using natural gas fuel.

Should you have any questions or require additional information, please contact Aaron Pursley via phone at 423-522-3001 or via e-mail at aaron_pursley@colpal.com.

On behalf of Colgate Palmolive Company, I agree to the above limitations. I am authorized to represent and bind the facility in environmental affairs.

Signature

Name (printed) Aaron Pursley

Title: Plant Manager

Date

11/6/21

June 22, 2020

Technical Secretary
Tennessee Division of Air Pollution Control
15th Floor, William R Snodgrass Tennessee Tower
312 Rosa L Parks Avenue
15th Floor, Nashville, TN 37243

Subject: Application for Minor Source Construction Permit
Addition of Dump Station Weight Tote
Emission Source Reference Number 32-0238

Ms. Technical Secretary:

The Colgate-Palmolive Company (CoPal) emission sources are covered by operating permits and permit-by-rule permits at its facility in Morristown in Hamblen County. Hamblen County is an unclassified or an attainment area for the National Ambient Air Quality Standard pollutants.

PROJECT

CoPal intends to construct a tote used to pre-weigh charcoal into a mixing vessel to blend the charcoal with sorbitol. The tote will be equipped with a dust collector to control dust that occurs from filling the tote with raw material.

PROJECT DESCRIPTION

A Mix Vessel will be installed to produce a charcoal-sorbitol solution blend. The sorbitol solution will be piped into the vessel through a dedicated port. The charcoal will be piped into the Mix Vessel through another port below the sorbitol liquid level. The Mix Vessel will have to be completely enclosed to allow the vacuum pump to operate. Negligible emissions of Volatile Organic Compounds (VOC) will occur due to evaporation of sorbitol. Though negligible, these emissions are quantified in the attachments. A process flow diagram appears in Attachment A. More technical detail is provided in the permit application forms in Attachment B. Supporting emission calculations appear in Attachment C.

The charcoal is pre-weighed in a tote at the dump station from where the charcoal is charged into the Mix Vessel. The tote cannot hold more than two batches of charcoal charge (at 450 pounds per charge). Assuming the tote is filled, it will process two charges in the mix Vessel at a minimum batch time of 2.5 hours. This means that 900 pounds of charge will be used over a period of 5 hours. Therefore 1 hour of Weighing Tote loading can potentially be conducted over a 5-hour period. This means that if the Weighing Tote is loaded to maximum capacity, the maximum loading operating schedule potential for the Weighing Tote is 1,752 hour per year.

The tote will be manually loaded from bags of charcoal that will lay on top of the tote opening and allowed to pour into the interior of the tote. An overlaying hood will capture the dust from filling the tote and vent into a 3000 cfm dust collector located at the exterior of the building.

APPLICABLE REQUIREMENTS

The facility is a true minor source of emissions. Since this project only releases particulate matter with a negligible quantity of VOC, this section will focus on particulate matter only. Table 1 gives a tally of the potential to emit particulate matter which includes the future operation of the weighing tote.

Table 1. Facility-Wide Emissions

Emission Source Reference Number	Source Description	Particulate Matter (ton/yr)
32-0238-01	Insignificant Activity, Silica Silo	0.18
32-0238-02	Two 700 hp Boilers at 28.6 MMBtu/hr, Each	60.01
32-0238-03	Insignificant Activity, Zeodent Silo	0.18
32-0238-04	Storage Silo	5.65
32-0238-05	4.03 MMBtu/hr Diesel-Fired Emergency Power Generator	10.60
32-0238-06	275 hp (205 kw) Internal Combustion Fire Pump Engine After April 2006 Model	0.02
32-0238-07	355 hp (261 Kw) Internal Combustion Fire Pump Engine after April 2006 Model	0.03
Project	Dump Station Weighing Tote	2.10
32-0238	Facility-Wide	78.77

Federal National Emission Standards for Hazardous Air Pollutants

Since this site is qualified as a True Minor source, a determination has been made that it is a Hazardous Air Pollutant (HAP) area source of emissions too. No HAP is released from this project; so, this project is not subject to 40 CFR 61 or 63 National Emission Standards of Hazardous Air Pollutants.

Federal New Source Performance Standards

The Federal Standard of Performance for Coal Preparation and Processing Plants of 40 CFR 60 Subpart Y was evaluated for applicability to this project. It was found that this project is not subject to this standard because charcoal is not coal. The definitions in this standard in 40 CFR §60.251(d) state that coal is a fossil fuel. Though fossil fuel is not directly defined in 40 CFR 60 Subpart Y, it is defined in 40 CFR §60.41 to be natural gas, petroleum, coal, and any form of solid, liquid, or gaseous fuel derived from such materials. Fossil is not defined in the rules; however, it is a "remnant, impression, or trace of an organism of past geologic ages that has been preserved in the earth's crust."¹ Charcoal is made from a remnant organism, timber; however it has not been preserved in earth's crust over a period of time.

The Federal Standard of Performance for Non-Metallic Mineral Processing of 40 CFR 60 Subpart OOO was evaluated for applicability to this project. It was found that this project is not subject to this standard because filling a tote is not among the operations regulated by this standard provided in 40 CFR §60.670(a) and the minerals regulated by this standard do not include charcoal or graphite as provided in 40 CFR §60.671 in the definition of a mineral. No crushing

¹ <https://www.merriam-webster.com/dictionary/fossil>

activities occur at this source.

No other New Source Performance Standards were found to potentially apply to this project.

Tennessee State Standards

Tennessee Air Pollution Control Regulations were evaluated and the general and source category standards were evaluated for applicability. The following were identified as applicable.

TAPCR 1200-3-5:

The visible emissions standard of TAPCR 1200-3-5-.01(1) and -.3(6) allow the Dump Station dust collector stack to release an opacity of no more than twenty (20) percent for an aggregate of more than five (5) minutes in any one (1) hour or more than twenty (20) minutes in any twenty-four (24) hour period.

TAPCR 1200-3-7:

TAPCR 1200-3-7-.03(1) which has a maximum allowable emission rate calculated by the formula:

$$E = 4.10 \times P^{0.67}$$

where,

E is the rate of emission and calculated to be 2.40 pounds per hour and P is the process weight rate of 900 pounds per hour and used as 0.45 tons per year in the formula.

TAPCR 1200-3-26:

Construction Permit Filing fees of TAPCR 1200-3-26-.02(5)(a) are made with this permit application. According to Schedule A of the this Chapter, a permit application requesting an emission limit with a Maximum Allowable that is less than 10 tons per year will have to submit a check payable to the "Division of Air Pollution Control" in the amount of \$100 US. The Maximum Allowable Emissions for this project are listed under "Project" to be 2.10 tons per year.

Other TAPCR Standards and Rules

The following are generally applicable while the other requirements are not applicable:

- TAPCR 1200-3-1 (General Provisions)
- TAPCR 1200-3-2 (Definitions)
- TAPCR 1200-3-3 (Ambient Air Quality Standards)
- TAPCR 1200-3-4 (Open Burning Certification Process)
- TAPCR 1200-3-8 (Fugitive Dust)
- TAPCR 1200-3-9 (Construction and Operating Permits)
- TAPCR 1200-3-10 (Required Sampling and Recordkeeping)
- TAPCR 1200-3-13 (Violations)
- TAPCR 1200-3-15 (Emergency Episode Plan)
- TAPCR 1200-3-20 (Limits of Emission due to Malfunction, Startup and Shutdown)
- TAPCR 1200-3-26 (Annual Fees)

SUMMARY

CoPal's consultant, Environmental Resources Management (ERM) assisted in preparing the technical aspects of this permit application. In summary, CoPal is proposing to install a Weighing tote equipped with a dust collector. The facility is a True minor source of emissions. The addition of this unit maintains the True Minor status.

The Mix Vessel that is serviced by the weighing tote can be classified as an insignificant activity because its VOC emissions are negligible as provided in the form supporting emission calculations.

If you have any questions regarding this application, please contact Mr. Chris Manis, EOHS Focus Resource at (423) 522-3331.

Sincerely,

A handwritten signature in black ink, appearing to read 'Doug Dils', with a long horizontal flourish extending to the right.

Doug Dils
Plan Manager

Attachment

cc: Chris Manis, EOHS Focus Resource – Colgate –Palmolive Company
Jeffrey H. Twaddle, P.E. – Environmental Resources Management

Appendix 7: Example Logs

Monthly Natural Gas Usage Log for Source 02 Boilers

Year_____

Month	Natural Gas Usage (ft ³)	Month	Natural Gas Usage (ft ³)
January		July	
February		August	
March		September	
April		October	
May		November	
June		December	

Sylodent Usage Log for Source 04

Month_____

Year_____

Day	Sylodent Processed (Tons or lbs)	Hours of Operation	Daily Average Material Processed (lbs/hr)	Day	Sylodent Processed (Tons or lbs)	Hours of Operation	Daily Average Material Processed (lbs/hr)
1				17			
2				18			
3				19			
4				20			
5				21			
6				22			
7				23			
8				24			
9				25			
10				26			
11				27			
12				28			
13				29			
14				30			
15				31			
16							

**The daily average basis is to be calculated by dividing the mass value of a day's material processed (lbs.) by the hours of operation for that same day.*

Weekly Log of Fabric Filter Visual Inspections:

Year_____

[illegible]

Daily Log of Dust Collector Pressure Drop Readings

Month_____ Year_____

Day	Reading Time	Charcoal tote operating?		Dust collector operating?		Dust Collector Pressure Drop (inches of water)	Comments / Corrective Actions	Initials
		Yes	No	Yes	No			
1		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>			
2		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>			
3		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>			
4		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>			
5		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>			
6		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>			
7		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>			
8		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>			
9		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>			
10		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>			
11		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>			
12		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>			
13		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>			
14		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>			
15		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>			
16		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>			
17		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>			
18		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>			
19		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>			
20		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>			
21		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>			
22		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>			
23		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>			
24		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>			
25		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>			
26		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>			
27		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>			
28		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>			
29		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>			
30		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>			
31		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>			

Appendix 8: General Provisions for 40 CFR Part 60, Subpart Dc

You are required to comply with the following General Provisions of the federal Standards of Performance for New Stationary Sources (NSPS):

General provisions citation 40 CFR	Subject of citation	Applies to subpart	Explanation
§60.1	General applicability of the General Provisions	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	Certain provisions of general provisions applicable to permitted source
§60.2	Definitions	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	Certain defined terms applicable to permitted source
§60.3	Units and abbreviations	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	Certain units and abbreviations are applicable to permitted source
§60.4	Address	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	EPA regional office address for notification or report submittals
§60.5	Determination of construction or modification	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	Operating permit for existing source
§60.6	Review of plans	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	Voluntary submittal (no construction currently applicable)
§60.7	Notification and Recordkeeping	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	Recordkeeping of fuel usage per subpart Dc
§60.8	Performance tests	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	No performance test required for permitted source (natural gas fired boiler)
§60.9	Availability of information	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	Information concerning permitted source may be made available to public by EPA
§60.10	State Authority	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	State is authorized to require permits and enforce source emission standards
§60.11	Compliance with standards and maintenance requirements	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	Source maintenance is required to minimize emissions to meet emission standards
§60.12	Circumvention	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	The use of dilutants or other methods to circumvent emission standards is prohibited
§60.13	Monitoring requirements	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	Continuous monitoring not required for permitted source
§60.14	Modification	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	Modification does not apply currently
§60.15	Reconstruction	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	Reconstruction does not apply currently
§60.16	Priority list	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	Permitted source is included in item 11 of priority list (Industrial, Commercial, Institutional Steam Generating Units)

§60.17	Incorporations by reference	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	Permitted source may be affected by standard methods incorporated by reference in rule
§60.18	General control device requirements	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	Low NOx burner for boiler of this permit is integral equipment per EPA guidance (not an add-on control device)
§60.19	General notification and reporting requirements	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	General requirements for submittal of notifications and reports

TAPCR 1200-03-09-.03(8) and 40 CFR Part 60, Subpart A