

I. Source Information

1. **Product/Process Description:** The source manufactures home laundry appliances, dishwashers and refrigerators.
2. **Project Description:** The source is installing one (1) 2.6 MMBtu/hr natural gas fired Preheat Eclipse Oven and one (1) 1.8 MMBtu/hr natural gas fired Post Heat Eclipse Oven.
3. **Site Determination:** There are no other facilities that are contiguous or adjacent and under common control.
4. **Emission Unit Summary:**

Construction No.	Equipment Description
29161-10-C(R2)	One (1) 2.6 MMBtu/hr natural gas fired Preheat Eclipse Oven and one (1) 1.8 MMBtu/hr natural gas fired Post Heat Eclipse Oven.

5. Permit Revisions:

Revision No.	Date of Issuance	Public Notice Date	Type	Emission Unit/Page No.	Description
Initial	12/21/2010	11/19/2010	Initial	Entire Permit	Initial Permit Issuance
R1	08/02/2011	07/01/2011	Revision	Entire Permit	Ovens shall be allowed to move from Research and Development use to production activities.
R2	X/X/2012	01/29/2012	Revision	Entire Permit	Increase in Post Heat Oven capacity from 1.4 MMBtu/hr to 1.8 MMBtu/hr due to a change in the designed air flow.

6. **Fugitive Sources:** There are no fugitive emissions for this project.

7. Plantwide Emission Summary:

Pollutant	District Calculated Actual Emissions 2010 Data (tpy)	Major Source Status (based on PTE)
CO	18.47	Yes

Pollutant	District Calculated Actual Emissions 2010 Data (tpy)	Major Source Status (based on PTE)
NO _x	25.79	Yes ¹
SO ₂	0.82	No
PM/PM ₁₀	8.33/8.33	No
VOC	9.14	Yes ²
Single HAP > 1 tpy		
Hydrogen Fluoride	1.14	Yes
Total HAPs	3.16	Yes

Note¹: Limit taken to not be major for pollutant.

Note²: Major for Title V, limit taken to not be major for pollutant for PSD.

8. Applicable Requirements:

PSD NSPS SIP MACT
 NSR NESHAPS District-Origin Other

9. MACT Requirements:

40 CFR 63 Subpart NNNN Large Appliance Surface Coating

10. Referenced Federal Regulations in Permit:

N/A

II. Regulatory Analysis

1. Acid Rain Requirements: The source is not subject to the Acid Rain Program.

2. Stratospheric Ozone Protection Requirements: Title VI of the CAAA regulates ozone depleting substances and requires a phase-out of their use. This rule applies to any facility that manufactures, sells, distributes, or otherwise uses any of the listed chemicals. This source does not manufacture, sell, or distribute any of the listed chemicals. The source’s use of listed chemicals is that in fire extinguishers, chillers, air conditioners and other HVAC equipment, and commercial refrigerators. Additionally, in 1995, the source voluntarily substituted a high ozone depleting with a low ozone depleting compound in its refrigerator foaming operation under a “pollution control project” which received formal EPA approval on May 1, 1995.

- 3. Prevention of Accidental Releases 112(r):** The source does not manufacture, process, use, store, or otherwise handle one or more of the regulated substances listed in 40 CFR Part 68, Subpart F, and District Regulation 5.15, *Chemical Accident Prevention Provisions*, in a quantity in excess of the corresponding specified threshold amount. If the source becomes subject to 40 CFR 68 and Regulation 5.15, the source shall comply with the Risk Management Program and Regulation 5.15 and submit a Risk Management Plan to:

RMP Reporting Center
P.O. Box 3346
Merrifield, VA 22116-3346

4. Basis of Regulation Applicability

a. **Applicable Regulations:**

Regulation	Title	Type
2.03	Permit Requirements – Non-Title V Construction and Operating Permits and Demolition/Renovation Permits	SIP
2.12	Emissions Trading (Including Banking and Bubble Rules)	SIP
2.16	Title V Operating Permits	SIP
5.01	General Provisions	Local
5.21	Environmental Acceptability for Toxic Air Contaminants	Local
6.16	Standard of Performance for Existing Large Appliance Surface Coating Operations	SIP
7.09	Standards of Performance for New Process Gas Streams	SIP
40 CFR 63 Subpart NNNN	Large Appliance Surface Coating	Federal

b. **Permit 29161-10-C(R2)**

i. **Equipment:**

Emission Points			
ID	Description	Applicable Regulation(s)	Basis for Applicability
29161-10-C(R2)	One (1) 2.6 MMBtu/hr natural gas fired Preheat Eclipse Oven and one (1) 1.8 MMBtu/hr natural gas fired Post Heat Eclipse Oven.	5.01	Regulation 5.01 establishes the requirements for Environmental Acceptability for TACs. The source is a Group I company with Category 1TACs which could exceed the de minimis values.
		6.16	This regulation applies to each affected facility which was in being or had a construction permit issued before May 15, 1991. Any source that is ever subject to this regulation shall always be subject to it unless the source changes its process to one not covered by this regulation.
		7.09	This regulation applies to each process operation that is the affected facility not otherwise regulated by other regulations of Regulation 7 and that commenced construction after April 19, 1976
		40 CFR 63 Subpart NNNN	The institutional large appliance coating is subject to 40 CFR 63 Subpart NNNN.

ii. **Standards/Operating Limits**

a. **VOC**

i. **Preheat Oven**

- a. Regulation 6.16, section 5.1 requires the VOC content of the coatings is less than 0.34 kilograms per liter of coating (2.8 pounds per gallon), excluding water and exempt solvents, delivered to the applicators associated with the prime, single or topcoat coating line.
- b. TV Permit 155-97-TV(R1) restricts the source from allowing the VOC emissions from emission point (EP305) to exceed 0.97 tons per 12 consecutive month period.

- ii. Post Heat Oven
 - a. Regulation 6.16, section 5.1 requires the VOC content of the coatings is less than 0.34 kilograms per liter of coating (2.8 pounds per gallon), excluding water and exempt solvents, delivered to the applicators associated with the prime, single or topcoat coating line.
 - b. Regulation 2.12 restricts the source from allowing the combined VOC emissions from emission points (EP309 and EP310) to exceed 4.82 tons per 12 consecutive month period.

b. **HAP**

Per Regulation 5.02, section 3.74, the source is subject to 40 CFR 63, Subpart NNNN.

c. **NO_x**

In accordance with Regulation 7.08, section 4, the NO_x fumes discharged to the atmosphere cannot be in excess of 300 ppm by volume expressed at NO₂.

d. **CO**

In accordance with Regulation 7.09, section 5.1, no carbon monoxide gases shall be emitted they are burned at 1,300°F for 0.5 seconds or greater in a direct flame afterburner or equivalent device equipped with an indicating pyrometer that is positioned in the working area at the operator's eye level.

e. **SO₂**

In accordance with Regulation 7.09, section 4, the affected facility emissions of the pollutant SO₂ shall not equal or exceed 40 tons during any twelve consecutive month period (four tons per month) or allow the release of a process gas stream containing sulfur dioxide with a concentration greater than 28.63 grains per 100 dscf at 0% excess oxygen.

f. **TACs**

Regulation 5.01 requires Group I sources to demonstrate environmental acceptability for each Category 1 TAC per Regulation 5.20, 5.21, 5.22, and 5.23.

iii. **Monitoring and Record Keeping**

a. **VOC**

Regulation 6.16, section 6 requires specific monitoring and record keeping requirements assuring ongoing compliance with the terms and conditions of the permit.

b. **HAP**

The source is required to comply with applicable monitoring and record keeping requirements of 40 CFR 63, Subpart NNNN.

c. **NO_x**

There are no monitoring or record keeping requirements for NO_x compliance.

d. **CO**

There are no monitoring or record keeping requirements for CO compliance.

e. **SO₂**

There are no monitoring or record keeping requirements for SO₂ compliance for SO₂ compliance for meeting the 40 tons during any twelve consecutive month period or four tons per month limit or the owner or operator shall keep a record of the determination of the process gas stream concentration and if it exceeds the sulfur dioxide limit.

f. **TACs**

The TAC emissions from the combustion of natural gas are considered to be “de minimis emissions” by the District, therefore no monitoring and record keeping requirements for this equipment. The source must maintain records

sufficient to demonstrate environmental acceptability, including, but not limited to, MSDS, analysis of emissions and calculations. Since the application is for natural gas combustion with no change in the product line, this modification is de minimis under the STAR regulations.

e. **Emissions Calculation Methodology**

The emission calculations are based on the amount of natural gas used and AP-42 emission factors.

iv. **Reporting**

a. **VOC**

Regulation 6.16 does not require any specific reporting requirements for VOC, however, Regulation 2.16, section 4.1.9.3 requires reporting to assure compliance with the terms and conditions of the permit.

b. **HAP**

The source is required to comply with applicable reporting requirements of 40 CFR 63, Subpart NNNN.

c. **NO_x**

There are no compliance reporting requirements for this equipment.

d. **CO**

There are no compliance reporting requirements for this equipment.

e. **SO₂**

Regulation 7.09 does not require any specific reporting requirements for SO₂, however, Regulation 2.16, section 4.1.9.3 requires reporting to assure compliance with the terms and conditions of the permit.

f. **TACs**

Upon re-evaluating environmentally acceptable (EA) levels, the owner or operator shall submit the EA demonstration to

the District within six (6) months of the change that prompted re-evaluation to prove that the process remains EA.

III. Other Requirements

1. **Temporary Sources:** The source did not request to operate any temporary facilities.
2. **Short Term Activities:** The source did not report any short term activities.
3. **Emissions Trading:** N/A
4. **Operational Flexibility:** The source did not request any operational flexibility for the emission point.
5. **Compliance History:**

Incident Date(s)	Regulation Violated	Result
12/23/1989	6.16, Section 3 Appliance Coatings	Board Order 5-90
11/21/1990	5.04, Section 6 Standard for Demolition and Renovation; 5.13, Section 4(1), 6, 11, 14, 15 Work Practice	Agreement A-2-92
1/7/1991	2.03, Section 1.a Permit Requirements; 7.25, Section 1.b Performance Standards of Performance For New Sources Using Volatile Organic Compounds	Board Order 2-91
10/31/1991	6.16, Section 5.1 Excess VOC Emissions	Agreement A-14-92
10/30/1992	1.09 Prohibition of Air Pollution	Agreement A-79-92
4/1/1999	1.09 Prohibition of Air Pollution	Settled

6. **Permit Fee:** Construction permit fees are based on the combined VOC Preheat and Post Heat oven limits of 0.97 tpy and 4.82 tpy, respectively. The total emissions are less than 10 and greater than 5 tons per year of VOC.
7. **Insignificant Activities:** There are no insignificant activities contained in this construction permit.