



STATE OF TENNESSEE
DEPARTMENT OF ENVIRONMENT AND CONSERVATION
DIVISION OF AIR POLLUTION CONTROL
9TH FLOOR, L & C ANNEX
401 CHURCH STREET
NASHVILLE, TN 37243-1531

June 29, 2009

Mr. Bill Wiegand
Tutco, Inc.
500 Gould Drive
Cookeville, TN 38506

Re: 71-0190-02
62801

Dear Mr. Wiegand:

This correspondence is in response to your letter dated May 4, 2009. The information, which you provided, has undergone a preliminary review by the permit program.

It has been determined that each of the eight (8) new product lines described in your letter would constitute an *insignificant activity* or *insignificant emissions unit*, as defined in part 1200-3-9-.04(2)(a)3. of the Tennessee Air Pollution Control Regulations. Specifically, the proposed operation would result in potential emissions from each source of less than five (5) tons per year of each air contaminant and each regulated air pollutant that is not a hazardous air pollutant, and less than 1,000 pounds per year of each hazardous air pollutant.

For new sources, subparagraph 1200-3-9-.04(4)(a) of the Tennessee Air Pollution Control Regulations requires that the request for designation as an insignificant emissions unit be made at least thirty (30) days prior to the estimated starting date of construction. Your letter is accepted as the required notification. All applicable air pollution regulations must still be met by your facility.

If you have any questions concerning this correspondence, please contact Mr. Will Collins at (615) 532-9198.

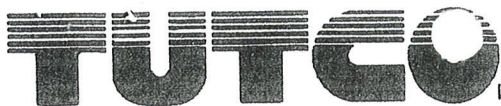
Sincerely,

A handwritten signature in cursive script, reading "Randall Thompson", is written over a horizontal line.

Randall Thompson, Chief
Middle Tennessee Permit Program

RT/WC

cc: Cookeville Environmental Field Office



INC./500 Gould Drive/Cookeville, Tennessee 38506/(931) 432-4141

MAY 13 2009

71-0190
Cook

State Of Tennessee

Dept. of Environment And Conservation
Division of Air Pollution Control
7th Floor L & C Annex, 401 Church St.
Nashville, TN 37243-0438

2009 MAY -7 PM 3: 29

May 4, 2009

71-0190-E

Technical Secretary
Tennessee Air Pollution Control Board

Dear Sir:

I am writing to you on behalf of TUTCO Inc. in Cookeville, TN about some product lines that TUTCO is moving into our Cookeville, TN facilities from a plant in Elmhurst, IL. There are eight (8) product lines that are going to be moved from Fast Heat in Elmhurst, IL to TUTCO's facilities in Cookeville, TN during the 2009 calendar year. There are also air emissions associated with the production of each of these product lines, but each product line operates independent of each other.

I am also writing to respectfully request that these product lines be considered as "insignificant activity" for air emissions based upon the emission records being submitted to you, and per the State's requirements stated in the Construction And Operating Permits manual, Chapter 1200-3-9, pages 154 and 155.

Should you need any other information from TUTCO Inc., please contact me at 931-432-7271 or 931-267-5078 and I will respond very promptly. My E-mail address is also (bwiegand@tutco.com).

Thank you for considering this request from TUTCO Inc.

Sincerely,

Bill Wiegand

Bill Wiegand
Manufacturing Engineering Manager
TUTCO Inc.
500 Gould Dr.
Cookeville, TN 38506

ANNOUNCEMENT

Illinois Environmental Protection Agency
2007 Annual Emission Report - Supporting Calculations
Fast Heat

2007 Air Emissions Calculations

Facility: Fast Heat, Inc.
 Location: 776 Oaklawn Avenue, Elmhurst, Illinois

1. Process/Emission Units: Band Heater Line with Electric Burn-Off Oven

Operation Level	Material Containing VOM (lbs/hr)	VOM/Formaldehyde HAP/PM-PM10 Emission Rate (lbs/hr)	VOM/Formaldehyde HAP/PM- PM10 Annual Emissions (lbs)	VOM/Formaldehyde HAP/PM-PM10 Annual Emissions (tons)
2007 Rate	3,838	0.012	43	0.022

Emission Calculations:

- 1) Aluminum oxide tape lbs/hr usage rate: $13,677 \text{ lbs/yr} / 3,564 \text{ hrs/yr} = 3.838 \text{ lbs/hr}$
- 2) Material containing VOM lbs/hr usage rate: 3.838 lbs/hr
- 3) Aluminum oxide tape usage VOM/Formaldehyde HAP/PM-PM10 lbs/hr emission rate: $13,677 \text{ lbs tape/yr} \times 0.05 \text{ binder content} \times 0.06 \text{ binder VOM/Formaldehyde HAP content} / 3,564 \text{ operating hrs/yr} = 0.012 \text{ lbs/hr}$
- 4) VOM/Formaldehyde HAP/PM-PM10 lbs/hr emission rate: 0.012 lbs/hr
- 5) VOM/Formaldehyde HAP/PM-PM10 annual emissions (lbs): $0.012 \text{ lbs/hr} \times 3,564 \text{ operating hrs/yr} = 43 \text{ lbs/yr}$

Note: PM-PM10 - Total particulate matter & particulate matter 10 microns, VOM - Volatile organic material, HAP - Hazardous Air Pollutant

Illinois Environmental Protection Agency
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Fast Heat

2. Process/Emission Units: High Temperature Cartridge Heater Line with Cure & Dry-Off Ovens

Operation Level	Material Containing VOM Throughput (lbs/hr)	VOM Emission Rate (lbs/hr)	VOM Annual Emissions (lbs)	VOM Annual Emissions (tons)
2007 Rate	0.423	0.378	771	0.386

Emission Calculations:

- 1) RTV GE 116 Red lbs/hr usage rate: 39 lbs/yr / 2,040 hrs/yr = 0.019 lbs/hr
- 2) RTV GE 112 White lbs/hr usage rate: 16 lbs/yr / 2,040 operating hrs/yr = 0.008 lbs/hr
- 3) RTV 157 Grey lbs/hr usage rate: 38 lbs/yr / 2,040 operating hrs/yr = 0.019 lbs/hr
- 4) RTV Primer GE SS4155 lbs/hr usage rate: 1 lb/yr / 2,040 operating hrs/yr = 0.0005 lbs/hr
- 5) Cops Epoxy Resin A-018 lbs/hr usage rate: 396 lbs/yr / 2,040 operating hrs/yr = 0.194 lbs/hr
- 6) Cops Epoxy Hardener B-218 lbs/hr usage rate: 312 lbs/yr / 2,040 operating hrs/yr = 0.153 lbs/hr
- 7) Abocure Epoxy 50-1 Part B lbs/hr usage rate: 18 lbs/yr / 2,040 operating hrs/yr = 0.009 lbs/hr
- 8) Abocure Epoxy 7505-2 Part A lbs/hr usage rate: 28 lbs/yr / 2,040 operating hrs/yr = 0.014 lbs/hr
- 9) Masterbond Supreme Epoxy 45HTND Part A lbs/hr usage rate: 9 lbs/yr / 2,040 operating hrs = 0.004 lbs/hr
- 10) Masterbond Supreme Epoxy 45HTND Part B lbs/hr usage rate: 3 lbs/yr / 2,040 hrs/yr = 0.001 lbs/hr
- 11) Material containing VOM lbs/hr usage rate: 0.019 lbs/hr + 0.008 lbs/hr + 0.019 lbs/hr + 0.0005 lbs/hr + 0.194 lbs/hr + 0.153 lbs/hr + 0.009 lbs/hr + 0.014 lbs/hr + 0.004 lbs/hr = 0.423 lbs/hr
- 12) RTV GE 116 Red VOM lbs/hr emission rate: 2.15 VOM lbs/yr / 2,040 hrs/yr = 0.001 lbs/hr
- 13) RTV GE 112 White VOM lbs/hr emission rate: 1 VOM lb/yr / 2,040 operating hrs/yr = 0.0005 lbs/hr
- 14) RTV 157 Grey VOM lbs/hr emission rate: 1.5 VOM lbs/yr / 2,040 operating hrs/yr = 0.0007 lbs/hr
- 15) RTV Primer GE SS4155 VOM lbs/hr emission rate: 1 lb/yr / 2,040 operating hrs/yr = 0.0005 lbs/hr
- 16) Cops Epoxy Resin A-018 VOM lbs/hr emission rate: 396 lbs/yr / 2,040 operating hrs/yr = 0.194 lbs/hr
- 17) Cops Epoxy Hardener B-218 VOM lbs/hr emission rate: 312 lbs/yr / 2,040 operating hrs/yr = 0.153 lbs/hr
- 18) Abocure Epoxy 50-1 Part B VOM lbs/hr emission rate: 18 lbs/yr / 2,040 operating hrs/yr = 0.009 lbs/hr
- 19) Abocure Epoxy 7505-2 Part A VOM lbs/hr emission rate: 28 lbs/yr / 2,040 operating hrs/yr = 0.014 lbs/hr
- 20) Masterbond Supreme Epoxy 45HTND Part A VOM lbs/hr emission rate: 9 lbs/yr / 2,040 operating hrs = 0.004 lbs/hr
- 21) Masterbond Supreme Epoxy 45HTND Part B VOM lbs/hr emission rate: 3 lbs/yr / 2,040 hrs/yr = 0.001 lbs/hr
- 22) VOM lbs/hr emission rate: Material Containing VOM (0.001 VOM lbs/hr + 0.0005 lbs/hr + 0.0007 lbs/hr + 0.0005 lbs/hr + 0.194 lbs/hr + 0.153 lbs/hr + 0.009 lbs/hr + 0.014 lbs/hr + 0.004 lbs/hr + 0.001 lbs/hr) = 0.378 VOM lbs/hr + Natural Gas-Fired Curing Oven & Drying Ovens VOM (0.0006 lbs/hr) = 0.378 lbs/hr
- 23) Material containing VOM annual emissions (lbs): 0.378 lbs/hr x 2,080 operating hrs/yr = 771 lbs/yr

Illinois Environmental Protection Agency
2007 Annual Emission Report - Supporting Calculations
 Fast Heat

2. Process/Emission Units: High Temperature Cartridge Heater Line with Cure & Dry-Off Ovens - Continued

AP-42 EMISSION CALCULATIONS - ACTUAL NATURAL GAS COMBUSTION EMISSIONS
 High Temperature Cartridge Heater Line Cement Cure & Dry-Off Ovens (2 Units - 50,000 Btu/hr Firing Rate per Unit)

Process	High Temperature Cartridge Heater Line Cement Cure & Dry-Off Ovens			
Actual Operating Hours	2,040	hours		
Combined Firing Rate	0.10	million Btu/hr		
Annual Natural Gas Usage	0.2	million scf		
Heat Content	1,000	Btu/scf		
<u>Actual Rate:</u>				
	AP-42 Emission Factor			
Pollutant	(lb/10 ⁶ scf)	Emissions (lb/hr)	Operating Hours	Emissions (tons/year)
Particulate Matter (PM)	7.60	0.0008	2,040	0.001
Carbon Monoxide (CO)	84.00	0.0084	2,040	0.009
Nitrogen Oxides (NOx)	100.00	0.0100	2,040	0.010
Volatile Organic Material (VOM)	5.50	0.0006	2,040	0.001
Sulfur Dioxide (SO2)	0.60	0.0001	2,040	0.000

Illinois Environmental Protection Agency
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 Fast Heat

3. Process/Emission Units: Sump Heater Line

Operation Level	Material Containing VOM Throughput (lbs/hr)	Material Containing VOM Emission Rate (lbs/hr)	Material Containing VOM Annual Emissions (lbs)	Material Containing VOM Annual Emissions (tons)
2007 Rate	0.632	0.409	810	0.405

Operation Level	Phenol HAP Emission Rate (lbs/hr)	Phenol HAP Annual Emissions (lbs)	Phenol HAP Annual Emissions (tons)
2007 Rate	0.008	16	0.008

Emission Calculations:

- 1) Copps Epoxy Resin A-018 lbs/hr usage rate: 396 lbs/yr / 1,980 operating hrs/yr = 0.208 lbs/hr
- 2) Copps Epoxy Hardener B-218 lbs/hr usage rate: 312 lbs/yr / 1,980 operating hrs/yr = 0.158 lbs/hr
- 3) Permabond 200 Adhesive lbs/hr usage rate: 19 lbs/yr / 1,980 operating hrs/yr = 0.01 lbs/hr
- 4) PCS BU-5006-55 Degreaser lbs/hr usage rate: 506 lbs/yr / 1,980 operating hrs/yr = 0.256 lbs/hr
- 5) Material containing VOM lbs/hr usage rate: 0.208 lbs/hr + 0.158 lbs/hr + 0.01 lbs/hr + 0.256 lbs/hr = 0.632 lbs/hr
- 6) Copps Epoxy Resin A-018 VOM lbs/hr emission rate: 396 lbs/yr / 1,980 operating hrs/yr = 0.2 lbs/hr
- 7) Copps Epoxy Hardener B-218 VOM lbs/hr emission rate: 312 lbs/yr / 1,980 operating hrs/yr = 0.158 lbs/hr
- 8) Permabond 200 Adhesive VOM lbs/hr emission rate: 19 lbs/yr / 1,980 operating hrs/yr = 0.01 lbs/hr
- 9) PCS BU-5006-55 Degreaser lbs/hr usage rate: 81 lbs/yr / 1,980 operating hrs/yr = 0.041 lbs/hr
- 10) Material containing VOM lbs/hr emission rate: 0.2 lbs/hr + 0.158 lbs/hr + 0.01 lbs/hr + 0.041 lbs/hr = 0.409 lbs/hr
- 11) Material containing VOM annual emissions (lbs): 0.409 lbs/hr x 1,980 operating hrs/yr = 810 lbs/yr
- 12) Phenol HAP annual emissions (lbs): 0.008 Phenol lbs/hr x 1,980 hrs/yr = 16 lbs/yr

Illinois Environmental Protection Agency
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Fast Heat

4. Process/Emission Units: Hot Runner Component Assembly Line with Cure Oven

Operation Level	Material Containing VOM Throughput (lbs/hr)	VOM Emission Rate (lbs/hr)	VOM Annual Emissions (lbs)	VOM Annual Emissions (tons)
2007 Rate	0.020	0.002	4	0.002

Emission Calculations:

- 1) RTV GE 116 Red lbs/hr usage rate: 39 lbs/yr / 1,980 hrs/yr = 0.02 lbs/hr
- 2) RTV Primer GE SS4155 lbs/hr usage rate: 1 lb/yr / 1,980 operating hrs/yr = 0.0005 lbs/hr
- 3) Material containing VOM lbs/hr usage rate: 0.02 lbs/hr + 0.0005 lbs/hr = 0.02 lbs/hr
- 4) RTV GE 116 Red VOM lbs/hr emission rate: 2.15 lbs/yr / 1,980 hrs/yr = 0.001 lbs/hr
- 5) RTV Primer GE SS4155 VOM lbs/hr emission rate: 1 lb/yr / 1,980 operating hrs/yr = 0.0005 lbs/hr
- 6) VOM lbs/hr emission rate: Material Containing VOM (0.001 lbs/hr + 0.0005 lbs/hr) + Natural Gas-Fired Curing Oven VOM (0.0003) = 0.002 lbs/hr
- 7) Material containing VOM annual emissions (lbs): 0.002 lbs/hr x 1,980 operating hrs/yr = 4 lbs/yr

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2007 Annual Emission Report - Supporting Calculations
Fast Heat

4. Process/Emission Units: Hot Runner Component Assembly Line with Cure Oven - Continued

AP-42 EMISSION CALCULATIONS - ACTUAL NATURAL GAS COMBUSTION EMISSIONS
Hot Runner Assembly Line Cement Cure Oven (50,000 Btu/hr Firing Rate)

Process	Hot Runner Component Assembly Cement Curing Oven
Actual Operating Hours	1,980 hours
Firing Rate	0.05 million Btu/hr
Annual Natural Gas Usage	0.1 million scf
Heat Content	1,000 Btu/scf

<u>Actual Rate:</u>		AP-42 Emission Factor	Emissions (lb/hr)	Operating Hours	Emissions (tons/year)
Pollutant	(lb/10 ⁶ scf)				
Particulate Matter (PM-PM10)	7.60		0.0004	1,980	0.000
Carbon Monoxide (CO)	84.00		0.0042	1,980	0.004
Nitrogen Oxides (NOx)	100.00		0.0050	1,980	0.005
Volatile Organic Material (VOM)	5.50		0.0003	1,980	0.000
Sulfur Dioxide (SO2)	0.60		0.00003	1,980	0.000

Illinois Environmental Protection Agency
2007 Annual Emission Report - Supporting Calculations
Fast Heat

5. Process/Emission Units: Refrigerator Heater Line

Operation Level	Material Containing VOM Throughput (lbs/hr)	VOM Emission Rate (lbs/hr)	VOM Annual Emissions (lbs)	VOM Annual Emissions (tons)
2007 Rate	0.444	0.444	880	0.440

Emission Calculations:

- 1) LPS ZeroTri Degreaser lbs/hr usage rate: $879 \text{ lbs/yr} / 1,980 \text{ hrs/yr} = 0.444 \text{ lbs/hr}$
- 2) LPS ZeroTri Degreaser VOM lbs/hr usage rate: $879 \text{ lbs/yr} / 1,980 \text{ hrs/yr} = 0.444 \text{ lbs/hr}$
- 3) LPS ZeroTri Degreaser VOM annual emissions (lbs): $0.444 \text{ lbs/hr} \times 1,980 \text{ operating hrs/yr} = 880 \text{ lbs/yr}$

6. Process/Emission Units: Belly Band Line

Operation Level	Material Containing VOM Throughput (lbs/hr)	VOM Emission Rate (lbs/hr)	VOM Annual Emissions (lbs)	VOM Annual Emissions (tons)
2007 Rate	0.190	0.190	399	0.200

Emission Calculations:

- 1) Dow 748 Sealant lbs/hr usage rate: $399 \text{ lbs/yr} / 2,100 \text{ hrs/yr} = 0.190 \text{ lbs/hr}$
- 2) Dow 748 Sealant VOM lbs/hr usage rate: $399 \text{ lbs/yr} / 2,100 \text{ hrs/yr} = 0.190 \text{ lbs/hr}$
- 2) Dow 748 Sealant annual emissions (lbs): $0.190 \text{ lbs/hr} \times 2,100 \text{ operating hrs/yr} = 399 \text{ lbs/yr}$

Illinois Environmental Protection Agency
2007 Annual Emission Report - Supporting Calculations
Fast Heat

7. Process/Emission Units: Rebuild Part Electric Burn-Off Oven

Operation Level	Residue Containing VOM/Styrene HAP/PM- PM10 Throughput (lbs/hr)	VOM/Styrene HAP/PM- PM10 Emission Rate (lbs/hr)	VOM/Styrene HAP/PM-PM10 Annual Emissions (lbs)	VOM/Styrene HAP/PM- PM10 Annual Emissions (tons)
2007 Rate	0.008	0.008	15	0.008

Emission Calculations: Worst case scenario based on styrene plastic residue that comprises minimal percentage of actual plastic residue

- 1) Rebuild part plastic residue quantity:
 - a. Sprue bushing rebuild part - 0.009 lbs residue
 - b. Sensitwin bushing rebuild part - 0.149 lbs residue
 - c. Machine nozzle rebuild part - 0.075 lbs residue
- 2) Burn-off oven plastic residue monthly throughput:
 - a. 22 Sprue bushing rebuild parts/month x 0.009 lbs residue/part = 0.199 lbs residue/month
 - b. 6 Sensitwin bushing rebuild parts/month x 0.149 lbs residue/part = 0.894 lbs residue/month
 - c. 2 Machine nozzle rebuild parts/month x 0.075 lbs residue/part = 0.149 lbs residue/month
- 3) Plastic residue VOM/HAP/PM-PM10 emissions per month: 0.199 lbs + 0.849 lbs + 0.150 lbs = 1.243 lbs
- 4) Plastic residue VOM/HAP/PM-PM10 annual emissions: 1.243 lbs/month x 12 months/yr = 15 lbs
- 5) Plastic residue VOM/HAP/PM-PM10 emissions per hour: 15 lbs/yr / 1,980 hrs/yr = 0.008 lbs

Illinois Environmental Protection Agency
2007 Annual Emission Report - Supporting Calculations
Fast Heat

8. Process/Emission Units: Standard Cartridge Heater Line with Cure Oven

AP-42 EMISSION CALCULATIONS - ACTUAL NATURAL GAS COMBUSTION EMISSIONS
Standard Cartridge Heater Line Cement Cure Oven (38,000 Btu/hr Firing Rate)

Process	Standard Cartridge Heater Line Cure Oven
Actual Operating Hours	2,000 hours
Firing Rate	0.04 million Btu/hr
Annual Natural Gas Usage	0.1 million scf
Heat Content	1,000 Btu/scf

Actual Rate:

Pollutant	AP-42 Emission Factor (lb/10 ⁶ scf)	Emissions (lb/hr)	Operating Hours	Emissions (tons/year)
Particulate Matter (PM-PM10)	7.60	0.0003	2,000	0.0003
Carbon Monoxide (CO)	84.00	0.0034	2,000	0.0034
Nitrogen Oxides (NOx)	100.00	0.0040	2,000	0.0040
Volatile Organic Material (VOM)	5.50	0.0002	2,000	0.0002
Sulfur Dioxide (SO2)	0.60	0.00002	2,000	0.0000

Illinois Environmental Protection Agency
2007 Annual Emission Report - Supporting Calculations
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10. Facility Total Air Emissions

2007 Operating Year

Air Pollutant	Band Heater Line with Electric Burn-Off Oven (tons/yr)	High Temperature Cartridge Heater Line with Cure & Dry Off Ovens (tons/yr)	Sump Heater Line (tons/yr)	Hot Runner Component Assembly Line with Cure Oven (tons/yr)	Refrigerator Heater Line (tons/yr)
VOM	0.022	0.386	0.405	0.002	0.440
PM-PM10	0.022	0.001		0.0004	
CO		0.009		0.004	
NOx		0.010		0.005	
SO2		0.0001		0.00003	
Formaldehyde HAP	0.022				
Phenol HAP			0.008		
Dibutyl Phthalate HAP					
Styrene HAP					

Illinois Environmental Protection Agency
2007 Annual Emission Report - Supporting Calculations
Fast Heat

10. Facility Total Air Emissions - Continued

Typical Operations Emissions Summary - 2,080 or less operating hours

Air Pollutant	Belly Band Line (tons/yr)	Part Rebuild Electric Burn- Off Oven (tons/yr)	Standard Cartridge Heater Line with Cure Oven (tons/yr)	2007 Total Air Emissions (tons/yr)
VOM	0.200	0.008	0.0002	1.462053
PM-PM10		0.008	0.0003	0.030455
CO			0.0034	0.016086
NOx			0.0040	0.019150
SO2			0.00002	0.000115
Formaldehyde HAP				0.021500
Phenol HAP				0.008000
Dibutyl Phthalate HAP				0.000000
Styrene HAP		0.008		0.007500