

Note: This is a reference cited in AP 42, *Compilation of Air Pollutant Emission Factors, Volume I Stationary Point and Area Sources*. AP42 is located on the EPA web site at www.epa.gov/ttn/chief/ap42/

The file name refers to the reference number, the AP42 chapter and section. The file name "ref02_c01s02.pdf" would mean the reference is from AP42 chapter 1 section 2. The reference may be from a previous version of the section and no longer cited. The primary source should always be checked.

AP42 Section:	9.13.2
Background Chapter	4
Reference:	9
Title:	Source Test Report For Volatile Organic Compounds And Carbon Monoxide Emissions From The Coffee Roaster 7D Thermal oxidizer At General Foods-Maxwell House Division, Hoboken, New Jersey, Air Consulting and Engineering, Inc., Gainesville, FL, May 9, 1991.

Emission Test Report Review Checklist--Short Form

Reviewer: TLAPP
Review Date: 8/21/94

A. Background Information

1. Facility name: GENERAL Foods Corp / MAXWELL House Div. APC PLANT
ID No.
10082

Location: Hoboken NJ

2. Source category: Coffee Roasting

3. Test date: MAY 9 1991

4. Test sponsor: GENERAL Foods

5. Testing contractor: AIR CONSULTING & ENGINEERING INC.

6. Purpose of test: Compliance Test for VOC & CO

7. Pollutants measured (include test method and indicate if valid): THC EPA Method 25A
CO " " 10

8. Process overview: Attach a process description and a block diagram. Identify processes tested with letters from the beginning of the alphabet (A, B, C, etc...) and APC systems with letters from the end of the alphabet (V, W, X, etc...). Also identify test locations with Arabic numerals (1,2,3, ...). Using the ID symbols from the diagram, complete the table below.

Test ID	Process	Process ID	Emissions tested		APCD (controlled emissions only)
			Uncontrolled	Controlled	
	Coffee Roaster ID AFTERBURNER	NJ # 067			ID: Type: Model #:
					ID: Type: Model #:
					ID: Type: Model #:
					ID: Type: Model #:

B. Process Information

1. Provide a brief narrative description of the process and attach process flow diagram. (Note: If the process description provided in the test report is adequate, attach a copy here.)

See attached pages

D. Emission Data/Mass Flux Rates/Emission Factors

Test ID	Parameter	Units	Values reported			
			Run 2	Run 3	Run 4	AVG.
1	Stack temperature	Deg F	1593	1590	1586	
ROASTER--	Moisture	%	29.9	30.9	28.7	
AFTERBURNER	Oxygen	%	11.8	11.3	11.7	
OUTLET	Volumetric flow, actual	acfm	16076	15612	15716	
	Volumetric flow, standard*	dscfm	2907	2786	2901	
	Isokinetic variation	%	NA	NA	NA	
Circle: Production or feed rate		TPH	2.401	2.399	2.400	
Capacity:						
Pollutant concentrations:						
THC as methane		ppmdv	1.29	3.48	2.52	
CO		ppmdv	33.6	43.2	32.9	
Pollutant mass flux rates:						
THC as methane		lb/hr	0.00937	0.0242	0.0183	
CO		lb/hr	0.426	0.525	0.416	
Emission factors (ENGLISH UNITS):						AVERAGE
THC as methane		lb/ton	0.00390	0.01010	0.00761	0.00720
CO		lb/ton	0.177	0.219	0.173	0.190
Emission factors (METRIC UNITS):						AVERAGE
THC as methane		kg/Mg	0.00195	0.00505	0.00380	0.00360
CO		kg/Mg	0.0887	0.109	0.0867	0.0950

D. Emission Data/Mass Flux Rates/Emission Factors

Test ID	Parameter	Units	Values reported			
			Run 1	Run 2	Run 3	Run 4
	Stack temperature	°F	✓	1593	1590	1586
	Moisture	%	✓	29.9	30.9	28.7
	Oxygen	%	0	11.8	11.3	11.7
	Volumetric flow, actual	acfm	1	16076	15612	15716
	Volumetric flow, standard	scfm	D	2907	2786	2901
	Percent isokinetic					
Circle: Production or feed rate		lb/hr		4800	4800	4800
Capacity:		lb/hr		4800	4800	4800
Pollutant concentrations:						
→ Don't need value corrected to 7% O ₂	THC	ppm (dry)		1.97	5.04	3.81
	THC	ppm dv	✓	1.29	3.48	2.52
			0			
			1			
			D			
Pollutant mass flux rates:						
→ Don't need value corrected to 7% O ₂	THC	ppm (dry)		1.97	5.04	3.81
	THC	ppm dv	✓	1.29	3.48	2.52
			0			
			1			
			D			
Emission factors: RATE						
	THC	lb/hr		0.009	0.024	0.018
			✓			
			0			
			1			
			D			

NO PROCESS DATA!
VOID

Section 4 Reference ✓
AP-42 Reference

F10

Emission Test Report Review Checklist--Short Form

Reviewer: TRAPP
Review Date: 8/22/94

A. Background Information

1. Facility name: MELITTA USA INC. APC PLANT NO.
Location: CHERRY HILL 50365

2. Source category: Coffee Roasting

3. Test date: October 15 1991

4. Test sponsor: MELITTA

5. Testing contractor: AIR NOVA, INC

6. Purpose of test: Compliance TEST

7. Pollutants measured (include test method and indicate if valid): TOTAL PARTICULATE NJ TEST METHOD 1
THC NJ TEST METHOD 3-7
CO EPA METHOD 10

8. Process overview: Attach a process description and a block diagram. Identify processes tested with letters from the beginning of the alphabet (A, B, C, etc...) and APC systems with letters from the end of the alphabet (V, W, X, etc...). Also identify test locations with Arabic numerals (1,2,3, ...). Using the ID symbols from the diagram, complete the table below.

Test ID	Process	Process ID	Emissions tested		APCD (controlled emissions only)
			Uncontrolled	Controlled	
	PROBAT CATALYZER (INLET/OUTLET)	NJ STACK NO. 020			ID: Type: Model #:
	↑ COFFEE ROASTING				ID: Type: Model #:
					ID: Type: Model #:
					ID: Type: Model #:

Process Description -
(see attached pages)

Control device is a catalytic incinerator

D. Emission Data/Mass Flux Rates/Emission Factors

INLET / OUTLET

Test ID	Parameter	Units	Values reported			
			Run 1	Run 2	Run 3	Run 4
	Stack temperature	°F	423/945	425/898	422/849	
	Moisture	% outlet	20.1	20.1	18.7	
	Oxygen	%	15/12	15/12	15/12	
	Volumetric flow, actual					
	Volumetric flow, standard	dsfm	ND/416	ND/404	ND/422	
	Percent isokinetic	outlet	104	109	104	

Circle: Production or feed rate

Capacity:

Pollutant concentrations:

Pollutant mass flux rates:

TOTAL PARTICULATE	OUTLET	gr/dscfm	0.015	0.011	0.015
THC (as methane)	inlet	ppm dry	705	472	486
	OUTLET	ppm dry	8.6	9.9	9.5

Emission factors: R_{preS}

2.0 SITE INFORMATION

The emission control device under evaluation is a Probat catalyzer designed for the control of waste air from the roasting operation by catalytic post-combustion of the odorous gases. The catalyzer consists of a filter-like hollow cylinder made of an active substrate situated in a conical insulated casing. The catalytic reaction of the Volatile Organic Compounds (VOCs) takes place at a temperature which is available during the roasting process following the hot-air furnace. Following treatment, the exhaust gases are routed to atmosphere.

Outlet emission sampling was conducted in a vertical section of 14 inch ID exhaust ducting. Two sample ports situated 90° apart were used for sampling traverses. The ports were situated 10.9 duct diameters downstream and 1.1 duct diameters upstream from any flow disturbance.

Inlet sampling was conducted in a vertical section of 13 inch ID ducting located 1 duct diameter downstream and 1 duct diameter upstream from the nearest flow disturbance. Two sample ports situated 90° apart were utilized for all sampling.

A system diagram, indicating the test locations is presented in Figure 2-1.

AirNova, Inc.

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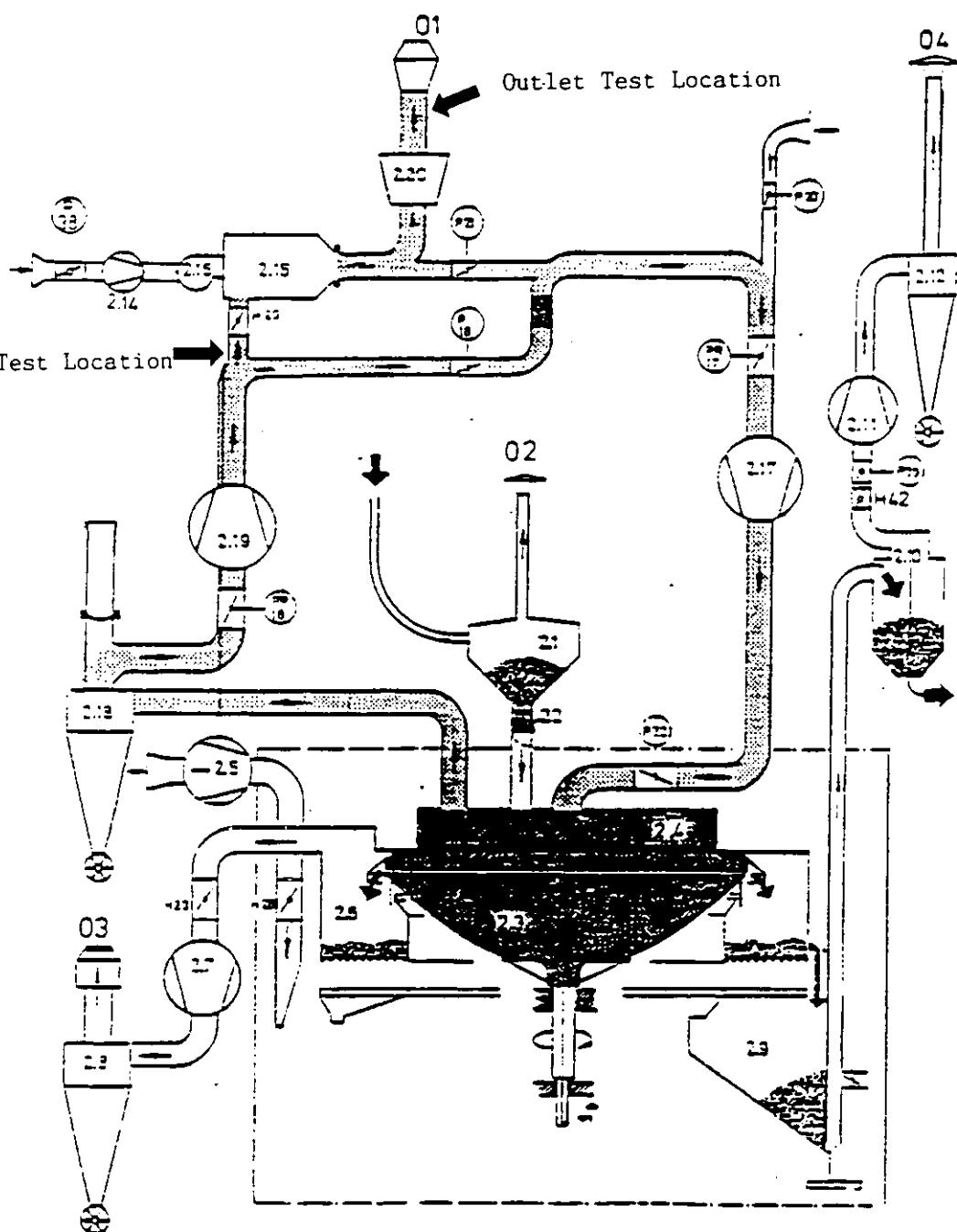


Figure 2-1 Emission Test Locations