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: | 8 |
| Title: | Source Test Report For Particulate, 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, December 20, 1990. |

(#8)

Section 4 Reference ✓
AP-42 Reference ___

# Emission Test Report Review Checklist--Short Form

Reviewer: TLAPP
Review Date: 8/21/94

## A. Background Information

1. Facility name: General Foods / Maxwell House Div. (APC Plant ID No. 10082)
   Location: Hoboken NJ
2. Source category: Coffee Roasting
3. Test date: December 20, 1990
4. Test sponsor: General Foods
5. Testing contractor: Air Consulting & Engineering, Inc
6. Purpose of test: Emission Compliance Test
7. Pollutants measured (include test method and indicate if valid):
   Total Particulate — EPA Method 5
   THC (as Methane) — " " 25 A
   CO — " " 10
   $CO_2$ — " " 3 (analyzer not specified)
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 TD Afterburner Outlet | NJ #'s 060 thru 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 sheets
(Tested outlet only)

Filename: COFFEE8.WQ1

D. Emission Data/Mass Flux Rates/Emission Factors

| Test ID | Parameter | Units | Values reported | | | |
|---|---|---|---|---|---|---|
| | | | Run 1 | Run 2 | Run 3 | Run 4 |
| 1 | Stack temperature | Deg F | 1510 | 1516 | 1520 | |
| ROASTER--AFTERBURNE OUTLET | Moisture | % | 18.6 | 19.9 | 19 | |
| | Oxygen | % | 11.4 | 11.4 | 11.4 | |
| | Volumetric flow, actual | acfm | 17422 | 17046 | 17173 | |
| | Volumetric flow, standard* | dscfm | 3916 | 3759 | 3822 | |
| | Isokinetic variation | % | 93.6 | 98.7 | 97 | |
| Circle: Production or feed rate Capacity: | | TPH | 2.398 | 2.399 | 2.405 | |
| | Pollutant concentrations: | | | | | |
| | Filterable PM | G/dscf | 0.0111 | 0.0129 | 0.0133 | |
| | THC as methane | ppmdv | 1.95 | 1.95 | 2.37 | |
| | CO | ppmdv | 64.5 | 77.5 | 61 | |
| | CO2 | % | 5.0 | 4.3 | 4.3 | |
| | Pollutant mass flux rates: | | | | | |
| | Filterable PM | lb/hr | 0.373 | 0.416 | 0.436 | |
| | THC as methane | lb/hr | 0.0191 | 0.0183 | 0.0226 | |
| | CO | lb/hr | 1.10 | 1.27 | 1.02 | |
| | CO2 | lb/hr | 1342 | 1108 | 1126 | |
| | Emission factors (ENGLISH UNITS): | | | | | AVERAGE |
| | Filterable PM | lb/ton | 0.155 | 0.173 | 0.181 | 0.170 |
| | THC as methane | lb/ton | 0.00796 | 0.00763 | 0.00941 | 0.00833 |
| | CO | lb/ton | 0.459 | 0.530 | 0.423 | 0.471 |
| | CO2 | lb/ton | 560 | 462 | 468 | 497 |
| | Emission factors (METRIC UNITS): | | | | | AVERAGE |
| | Filterable PM | kg/Mg | 0.0777 | 0.0866 | 0.0906 | 0.0850 |
| | THC as methane | kg/Mg | 0.00398 | 0.00382 | 0.00471 | 0.00417 |
| | CO | kg/Mg | 0.230 | 0.265 | 0.211 | 0.235 |
| | CO2 | kg/Mg | 280 | 231 | 234 | 248 |

## 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 | 1510 | 1516 | 1520 | |
| | Moisture | %V | 18.6 | 19.9 | 19.0 | |
| | Oxygen | %V/V day | 11.4 | 11.4 | 11.4 | |
| | Volumetric flow, actual | acfm | 17422 | 17046 | 17173 | |
| | Volumetric flow, standard | dscfm | 3916 | 3759 | 3822 | |
| | Percent isokinetic | | | | | |
| Circle: Production or feed rate Capacity: | | lbs/hr. | 4,~~916~~ | 4,~~22~~3 | 5,~~15~~3 | obtained from chart recorder |
| | **Pollutant concentrations:** | | | | | |
| | PARTICULATE | grams | 0.0312 | 0.0274 | 0.0282 | |
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| | **Pollutant mass flux rates:** | | | | | |
| | PARTICULATE | gr/dscf(d) | 0.0111 | 0.0129 | 0.0133 | |
| | THC 7% $O_2$ | ppmv (d) | 2.85 | 2.85 | 3.47 | |
| Don't want value corrected to 7% $O_2$ | THC as methane (uncorrected) | ppmdv | 1.95 | 1.95 | 2.37 | |
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| | **Emission ~~factors:~~** RATES | | | | | |
| | PARTICULATE | lbs/hr | 0.37 | 0.42 | 0.44 | |
| | THC (uncorrected) | " | 0.019 | 0.018 | 0.023 | |
| | ~~THC as methane~~ | ~~lb/hr~~ | | | | |
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