

Section I: AQMD BACT Determinations

Application No.: 413559

Equipment Category – Dryer or Oven

1. GENERAL INFORMATION		DATE: 9/15/2004
A. MANUFACTURER: Spray Systems		
B. TYPE: Direct-Fired Makeup Air Heater for Automotive Type Side-Draft Spray Booth		C. MODEL: MD1000 (Spray Booth)
D. STYLE: Manual application of coatings by workers within spray booth		
E. APPLICABLE AQMD RULES: 401, 402		
F. COST: \$ (NA) SOURCE OF COST DATA:		
G. OPERATING SCHEDULE: 10 HRS/DAY 4 DAYS/WK 50 WKS/YR		

2. EQUIPMENT INFORMATION		APP. NO.: 413559
A. FUNCTION: Heats spray booth ventilation air to control booth temperature. This spray booth is used for application of coatings and for drying/curing coated parts used in manufacture of aerial refueling system components. The booth is in use approximately half time on a batch basis with batch times running typically one to three hours. Booth temperature varies from approximately 70F to a maximum of 130F, depending on the operation taking place. The facility operates 4 days/week, two 10-hr shifts per day.		
B. MAXIMUM HEAT INPUT: 1.9 MMBtu/hr		C. MAXIMUM THROUGHPUT: Two 10 hp exhaust fans
D. BURNER INFORMATION: NO.: 1 TYPE: Low-NOx		
E. PRIMARY FUEL: Natural Gas		F. OTHER FUEL: None
G. OPERATING CONDITIONS: Firing rate varies with air throughput. Maximum booth temperature is 130F.		

3. COMPANY INFORMATION		APP. NO.: 413559
A. NAME: Sargent Fletcher		B. SIC CODE: 3728
C. ADDRESS: 9400 East Flair Drive CITY: El Monte STATE: CA ZIP: 91731		
D. CONTACT PERSON: Gilbert Tanon		E. PHONE NO.: 626-402-2205

4. PERMIT INFORMATION		APP. NO.: 413559
A. AGENCY: SCAQMD		B. APPLICATION TYPE: new construction
C. AGENCY CONTACT PERSON: Emmanuel Quizon		D. PHONE NO.: 909-396-2523
E. PERMIT TO CONSTRUCT/OPERATE INFORMATION: P/C NO.: 413559 ISSUANCE DATE: 5/27/2003 <input type="checkbox"/> CHECK IF NO P/C P/O NO.: F67626 ISSUANCE DATE: 4/6/2004		
F. START-UP DATE: October 2003		

5. EMISSION INFORMATION

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A. PERMIT

A1. PERMIT LIMIT: Spray booth temperature not to exceed 130F. NOx not to exceed 30 ppmvd@3%O2 (30-Minute average).

A2. BACT/LAER DETERMINATION: NOx: 30 ppmvd@3%O2

A3. BASIS OF THE BACT/LAER DETERMINATION:

B. CONTROL TECHNOLOGY

B1. MANUFACTURER/SUPPLIER: Eclipse Combustion

B2. TYPE: Nozzle-Mix Low-NOx burner

B3. DESCRIPTION: Winnox WX 200

B4. CONTROL EQUIPMENT PERMIT APPLICATION DATA: P/C NO.: ISSUANCE DATE:
P/O NO.: ISSUANCE DATE:

B5. WASTE AIR FLOW TO CONTROL EQUIPMENT: FLOW RATE:
ACTUAL CONTAMINANT LOADING: BLOWER HP:

B6. WARRANTY: Manufacturer guaranteed 30 ppmvd@3%O2 NOx and 5 ppmvd CO.

B7. PRIMARY POLLUTANTS: NOx, CO, VOC, PM10

B8. SECONDARY POLLUTANTS:

B9. SPACE REQUIREMENT:

B10. LIMITATIONS: B11. UNUSED

B12. OPERATING HISTORY: The makeup air heater has been in regular use since October 2003.

B13. UNUSED B14. UNUSED

C. CONTROL EQUIPMENT COSTS

C1. CAPITAL COST: CHECK IF INSTALLATION COST IS INCLUDED IN EQUIPMENT COST

EQUIPMENT: \$ INSTALLATION: \$ (NA) SOURCE OF COST DATA:

C2. ANNUAL OPERATING COST: \$ (NA) SOURCE OF COST DATA:

D. DEMONSTRATION OF COMPLIANCE

D1. STAFF PERFORMING FIELD EVALUATION:
ENGINEER'S NAME: INSPECTOR'S NAME: DATE:

D2. COMPLIANCE DEMONSTRATION:

D3. VARIANCE: NO. OF VARIANCES: None DATES:
CAUSES:

D4. VIOLATION: NO. OF VIOLATIONS: None DATES:
CAUSES:

D5. MAINTENANCE REQUIREMENTS: D6. UNUSED

5. EMISSION INFORMATION

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D7. SOURCE TEST/PERFORMANCE DATA RESULTS AND ANALYSIS:

DATE OF SOURCE TEST: 11/10/2003

CAPTURE EFFICIENCY:

DESTRUCTION EFFICIENCY:

OVERALL EFFICIENCY:

SOURCE TEST/PERFORMANCE DATA: 20.76% O₂ (dry vol.), 0.23% CO₂ (dry vol.), 0.21 ppmvd NO_x,
1.3 ppmvd CO---PPMVD@3%O₂: 27 NO_x, 162 CO

OPERATING CONDITIONS: Normal. Booth temperature 130F.

TEST METHODS: AQMD Method 100.1. Test report was approved by AQMD Monitoring & Source Test Engineering group. Minimum 20% of analyzer range requirement was waived in this case. Based on USEPA's Method 19, the NO_x emission rate is .011 lb/MMBtu using the CO₂ F-factor method and .033 lb/MMBtu using the O₂ F-factor method. Both are less than the .036 lb/MMBtu emission rate that is equivalent to 30 ppmvd@3%O₂.

6. COMMENTS

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