Section I: AQMD BACT Determinations

Application No.: 322432

Equipment Category - Spray Booth

1. GENERAL INFORMATION

DATE: 3/18/2004

A. MANUFACTURER:

B. TYPE: Powder Coating Booth

C. MODEL:

D. STYLE:

E. APPLICABLE AQMD RULES: 1107, 1171

F. COST: $ (NA) SOURCE OF COST DATA:

G. OPERATING SCHEDULE: 8 HRS/DAY 5 DAYS/WK 52 WKS/YR

2. EQUIPMENT INFORMATION

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A. SIZE/DIMENSION/CAPACITY: 4'Wx9'Lx7'H

B. BLOWERS: 20 hp

C. TOTAL FLOW RATE: scfm

D. FILTERS: baghouse-40 filters, 6"Dx11'-1"L each

E. PARTS COATED: steel bars, rods, pipes

F. TYPE OF COATING/ADHESIVE/SOLVENT USED: Epoxy

3. COMPANY INFORMATION

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A. NAME: Fletcher Coating

B. SIC CODE: 3499

C. ADDRESS: 426 Fletcher Ave.

CITY: Orange STATE: CA ZIP: 92865

D. CONTACT PERSON: Kurtis Breeding

E. PHONE NO.: 714-637-4763

4. PERMIT INFORMATION

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A. AGENCY: SCAQMD

B. APPLICATION TYPE: change of conditions

C. AGENCY CONTACT PERSON: Ed O'Neal

D. PHONE NO.: 909-396-2565

E. PERMIT TO CONSTRUCT/OPERATE INFORMATION: P/C NO.: D77982 ISSUANCE DATE: 10/27/1993

☐ CHECK IF NO P/C P/O NO.: F5409 ISSUANCE DATE: 2/19/1997

F. START-UP DATE: 1980

5. EMISSION INFORMATION

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A. PERMIT

A1. PERMIT LIMIT: Only powder coatings may be used. Facility cap of 26,000 lb total powder sprayed. Booth must be vented to cyclone and dust collector. Cleanup materials to contain no VOC.

A2. BACT/LAER DETERMINATION: Use of powder coating and zero-VOC cleanup materials.

5. EMISSION INFORMATION

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A3. BASIS OF THE BACT DETERMINATION: Powder coating, which has very low VOC emission characteristics, is now achieved in practice technology for applying coatings to many types of metal parts.

B. CONTROL TECHNOLOGY

B1. MANUFACTURER/SUPPLIER: Torit

B2. TYPE: Cyclone and dust collector, models 22FM and 22F65, respectively.

B3. DESCRIPTION: The particulate collection system is intrinsic to this process so that overspray material can be recovered and reused, which is vital to the economics of the process.

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:

B7. PRIMARY POLLUTANTS: PM, VOC

B8. SECONDARY POLLUTANTS: None

B9. SPACE REQUIREMENT:

B10. LIMITATIONS: B11. UNUSED

B12. OPERATING HISTORY: This equipment has been in regular use for many years.

B13. UNUSED B14. UNUSED

C. CONTROL EQUIPMENT COSTS

C1. CAPITAL COST: ☐ CHECK IF INSTALLATION COST IS INCLUDED IN CAPITAL COST
EQUIPMENT: $ INSTALLATION: $ (NA) SOURCE OF COST DATA:

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

D. DEMONSTRATION OF COMPLIANCE

D1. STAFF PERMFORMING FIELD EVALUATION:
ENGINEER'S NAME: INSPECTOR'S NAME: Rhonda Laugeson DATE: 4/30/2002

D2. COMPLIANCE DEMONSTRATION: Inspection--found facility to be operating in compliance.

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

D4. VIOLATION: NO. OF VIOLATIONS: 2 DATES: 10/31/96, 1/5/01
CAUSES: 10/31/96-missing records, faulty guage, altered baghouse; 1/5/01-powder usage in one booth exceeded daily limit in permit (this permit condition subsequently removed).

D5. MAINTENANCE REQUIREMENTS: D6. UNUSED

D7. SOURCE TEST/PERFORMANCE DATA RESULTS AND ANALYSIS:
DATE OF SOURCE TEST: CAPTURE EFFICIENCY:
DESTRUCTION EFFICIENCY: OVERALL EFFICIENCY:
SOURCE TEST/PERFORMANCE DATA:
OPERATING CONDITIONS:
TEST METHODS:

6. COMMENTS

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This is one of four similar powder coating booths at this facility. Parts to be coated are preheated in a 500F oven. The coating is sprayed onto the hot metal and melts in place. The coated parts are allowed to cool in air. Product data sheets for the coating materials used show that all coating materials are zero VOC (although, because the products have not been tested for VOC release using AQMD Method 316C, a presumptive 1% VOC content is used for emission calculations). This facility does "functional" coating, which is intended for corrosion protection. Other facilities do decorative coating, and low-VOC materials are available for those applications as well. There are many suppliers of powder coating materials including DuPont, 3M, Rohm& Haas and Eli Lilly.