P 085 152 659

RECEIPT FOR CERTIFIED MAIL

NO INSURANCE COVERAGE PROVIDED
NOT FOR INTERNATIONAL MAIL

(See Reverse)

Sent to Mr. Larry E. McIntyre	
Street and No.	
P.O., State and ZIP Code	
Postage	$
Certified Fee	
Special Delivery Fee	
Restricted Delivery Fee	
Return Receipt Showing to whom and Date Delivered	
Return receipt showing to whom, Date, and Address of Delivery	
TOTAL Postage and Fees	$
Postmark or Date 9/23/85	

PS Form 3800, Feb. 1982 ★ U.S.G.P.O. 1984-446-014

PS Form 3811, July 1983

SENDER: Complete items 1, 2, 3 and 4.

Put your address in the "RETURN TO" space on the reverse side. Failure to do this will prevent this card from being returned to you. The return receipt fee will provide you the name of the person delivered to and the date of delivery. For additional fees the following services are available. Consult postmaster for fees and check box(es) for service(s) requested.

1. ☐ Show to whom, date and address of delivery.
2. ☐ Restricted Delivery.

3. Article Addressed to:
Mr. Larry E. McIntyre
FMC Corporation
7300 Presidents Drive
Orlando, FL 32809

4. Type of Service:
☐ Registered ☐ Insured
☒ Certified ☐ COD
☐ Express Mail

Article Number
P 085 152 659

Always obtain signature of addressee or agent and DATE DELIVERED.

5. Signature – Addressee
X

6. Signature – Agent
X

7. Date of Delivery SEP 26 1985

8. Addressee's Address *(ONLY if requested and fee paid)*

DOMESTIC RETURN RECEIPT

STATE OF FLORIDA

DEPARTMENT OF ENVIRONMENTAL REGULATION

TWIN TOWERS OFFICE BUILDING
2600 BLAIR STONE ROAD
TALLAHASSEE, FLORIDA 32301-8241

BOB GRAHAM
GOVERNOR

VICTORIA J. TSCHINKEL
SECRETARY

STATE OF FLORIDA
DEPARTMENT OF ENVIRONMENTAL REGULATION
NOTICE OF PERMIT

Mr. Larry E. McIntyre
Manufacturing Manager
FMC Corporation
Airline Equipment Division
7300 Presidents Drive
Orlando, Florida 32809

September 20, 1985

Enclosed is Permit Number AC 48-098145 to FMC Corporation which authorizes the modification of three existing paint spray booths and the construction of one new paint spray booth at FMC Corporation's existing facility in Orange County, Florida. This permit is issued pursuant to Section 403, Florida Statutes.

Any Party to this permit has the right to seek judicial review of the permit pursuant to Section 120.68, Florida Statutes, by the filing of a Notice of Appeal pursuant to Rule 9.110, Florida Rules of Appellate Procedure, with the clerk of the Department in the Office of General Counsel, 2600 Blair Stone Road, Tallahassee, Florida 32301; and by filing a copy of the Notice of Appeal accompanied by the applicable filing fees with the appropriate District Court of Appeal. The Notice of Appeal must be filed within 30 days from the date this permit is filed with the clerk of the Department.

Sincerely,

C. H. Fancy, P.E.
Deputy Chief
Bureau of Air Quality
Management

Enclosure

cc: Joseph L. Tessitore, P.E.
Suresh Chandnani

CERTIFICATION

This is to certify that the foregoing Notice of Permit and all copies requested were mailed before the close of business on September 23, 1985.

C. H. Fancy, P.E.
Deputy Chief
Bureau of Air Quality
Management
2600 Blair Stone Road
Tallahassee, Florida 32301

FILING AND ACKNOWLEDGEMENT
FILED, on this date, pursuant to §120.52(9), Florida Statutes, with the designated Department Clerk, receipt of which is hereby acknowledged.

Patricia G. Adams — Clerk

Sept. 23, 1985 — Date

Final Determination
FMC Corporation
Orange County, Florida

The construction application and attachments have been reviewed by the department. Public notice of the department's intent to issue was published in the Orlando Sentinel on July 28, 1985. The technical evaluation and preliminary determination (TEPD) were available for public inspection at the DER's St. Johns River District office and the DER's Bureau of Air Quality Management office.

Comments were received from Mr. Larry E. McIntyre, Manufacturing Manager with the FMC Corporation-Airline Equipment Division in Orlando, Orange County, Florida, and will become an attachment to the permit. The bureau's comments will follow and be numbered so as to correspond with the numbering of Mr. McIntyre's comments, which will not be restated:

1. The expiration date will be changed as requested:

   From: December 31, 1986
   To: June 30, 1987

2. Tables 1 and 3 in the TEPD reflected the allowable particulate matter (PM) emission rate as permitted in the construction permit, No. AC 48-48485, issued January 4, 1982, for the grit blaster:
   0.17 lb/hr x 16 hr/day x 7 day/wk x 52 wk/yr = 707.2 lb/yr

   However, since operational parameters have changed since being permitted, i.e., no PM emissions and therefore, no visible emissions, the following specific condition will be added to the proposed permit, No. AC 48-098145, as per the comment and a phone conversation with Mr. Russell Simmons, Manufacturing Engineer with the FMC Corporation-Airline Equipment Division in Orlando, Orange County, Florida, on August 27, 1985.

   No. 14: The grit blaster (AC 48-48485) is a self contained unit of operation such that there are no particulate matter emissions and visible emissions. Consequently, all construction, modification and operation permits shall be surrendered to the department.

3. Based on the referenced December 17, 1984 letter, which was received by the bureau on September 3, 1985, all references to "electrostatic" will be changed to "airless/air assisted" in the proposed permit, No. AC 48-098145.

4. There will not be a change in the General Condition(s) since they were adopted by rule and are not, therefore, negotiable.

5. Referencing Specific Condition No. 3, the operation is required to meet a VOC (volatile organic compounds) allowable emissions rate and on a daily basis.

6. Specific Condition No. 4 does require an emissions rate test for each paint formula, as applied, using EPA Method 24. A department representative does not perform the testing, but visually observes them. Therefore, no change will be made.

7. The following change will be made:

   No. 9:

   From: Objectionable odors shall not be allowed off plant property.

   To: No person shall cause, suffer, allow or permit the discharge of air pollutants which cause or contribute to an objectionable odor pursuant to FAC Rule 17-2.620(2). Objectionable odor is defined as any odor present in the outdoor atmosphere which by itself or in combination with other odors, is or may be harmful or injurious to human health or welfare, which unreasonably interferes with the comfortable use and enjoyment of life or property, or which creates a nuisance pursuant to FAC Rule 17-2.100(111). Odor is defined as a sensation resulting from stimulation of the human olfactory organ pursuant to FAC Rule 17-2.100(112).

8. The following change will be made:

   No. 11:

   From: The applicant will demonstrate compliance with the conditions of the construction permit, and submit a complete application for an operating permit to the Department's St. John River District office prior to 90 days of the expiration date of the construction permit. The applicant may continue to operate in compliance with all terms of the construction permit until its expiration date or issuance of an operating permit.

   To: The construction shall reasonably conform to the plans and schedule submitted in the application. If the applicant is unable to complete construction on schedule, he must notify the department in writing 60 days prior to the expiration of the construction permit and submit a new

schedule and request for an extension of the construction permit. (Rule 17-2.09, Florida Administrative Code)

To obtain a permit to operate, the applicant must demonstrate compliance with the conditions of the construction permit and submit a complete application for an operating permit, including the application fee, along with compliance test results and Certificate of Completion, to the department's District office 90 days prior to the expiration date of the construction permit. The permittee may continue to operate in compliance with all terms of the construction permit until its expiration date. Operation beyond the construction permit expiration date requires a valid permit to operate. (Rules 17-2.22 and 17-4.23, Florida Administrative Code)

If the construction permit expires prior to the applicant requesting an extension or obtaining a permit to operate, then all activities at the project must cease and the applicant must apply for a new permit to construct which can take up to 90 days to process a complete application. (Rule 17-4.10, Florida Administrative Code)

9. The following change will be made:

No. 12:

From: Upon obtaining an operating permit, the applicant will be required to submit periodic test reports on the actual operation and emissions of the facility.

To: Upon obtaining an operating permit, the applicant will be required to submit periodic test reports on the actual operation and emissions of the facility, such as paint analyses obtained by using EPA Method 24, paint vendors specifications to show concurrence with paint analyses performed, and the annual operating report which contains the quantified and qualified actual pollutant emissions from the facility.

Attachments to be incorporated are:

5. Mr. Larry E. McIntyre's letter with attachment dated August 15, 1985.

6. Mr. Larry E. McIntyre's letter dated December 17, 1984, received September 3, 1985, by the BAQM office.

The bureau will incorporate the changes to the Specific Conditions in the construction permit, No. AC 48-098145, as referenced above in the final determination. It is recommended that the construction permit be issued as drafted, with the above revisions and Attachments incorporated.

STATE OF FLORIDA

DEPARTMENT OF ENVIRONMENTAL REGULATION

TWIN TOWERS OFFICE BUILDING
2600 BLAIR STONE ROAD
TALLAHASSEE, FLORIDA 32301-8241

BOB GRAHAM
GOVERNOR

VICTORIA J. TSCHINKEL
SECRETARY

PERMITTEE:
FMC Corporation
Airline Equipment Division
7300 Presidents Drive
Orlando, Florida 32809

Permit Number: AC 48-098145
Expiration Date: June 30, 1987
County: Orange
Latitude/Longitude: 28° 27' 43"N/
81° 24' 39"W
Project: Four Paint Spray Booths:
Modify 3 Existing and
Construct a New One

This permit is issued under the provisions of Chapter 403, Florida Statutes, and Florida Administrative Code Rule(s) 17-2 and 17-4. The above named permittee is hereby authorized to perform the work or operate the facility shown on the application and approved drawings, plans, and other documents attached hereto or on file with the department and made a part hereof and specifically described as follows:

For the modification of 3 existing paint spray booths and construct a new paint spray booth (the 4th) at the applicants existing facility located in Orange County, Florida. The facility manufactures and processes airline ground support equipment. The paint spray booths are equipped with airless/air assisted spray guns and a water trap. The UTM coordinates are zone 17, 459.8 km East and 3148.2 km North.

The Source Classification Codes are 4-02-001-01 and 4-02-006-01.

Construction shall be in accordance with the permit application and plans, documents, amendments, and drawings except as otherwise noted on pages 5-8 of the "Specific Conditions."

Attachments are follows:

1. Application to modify/construct Air Pollution Sources, DER Form 17-1.202(1).
2. C. H. Fancy's letter dated February 6, 1985.
3. Larry E. McIntyre's letter with attachments dated May 16, 1985.
4. Interoffice Memorandum dated May 20, 1985, from Bruce Mitchell.
5. Mr. Larry E. McIntyre's letter with attachment dated August 15, 1985.
6. Mr. Larry E. McIntyre's letter dated December 17, 1984, received September 3, 1985, by the BAQM office.

PERMITTEE: FMC Corporation

Permit Number: AC 48-098145
Expiration Date: June 30, 1987

GENERAL CONDITIONS:

1. The terms, conditions, requirements, limitations, and restrictions set forth herein are "Permit Conditions" and as such are binding upon the permittee and enforceable pursuant to the authority of Sections 403.161, 403.727, or 403.859 through 403.861, Florida Statutes. The permittee is hereby placed on notice that the department will review this permit periodically and may initiate enforcement action for any violation of the "Permit Conditions" by the permittee, its agents, employees, servants or representatives.

2. This permit is valid only for the specific processes and operations applied for and indicated in the approved drawings or exhibits. Any unauthorized deviation from the approved drawings, exhibits, specifications, or conditions of this permit may constitute grounds for revocation and enforcement action by the department.

3. As provided in Subsections 403.087(6) and 403.722(5), Florida Statutes, the issuance of this permit does not convey any vested rights or any exclusive privileges. Nor does it authorize any injury to public or private property or any invasion of personal rights, nor any infringement of federal, state or local laws or regulations. This permit does not constitute a waiver of or approval of any other department permit that may be required for other aspects of the total project which are not addressed in the permit.

4. This permit conveys no title to land or water, does not constitute state recognition or acknowledgement of title, and does not constitute authority for the use of submerged lands unless herein provided and the necessary title or leasehold interests have been obtained from the state. Only the Trustees of the Internal Improvement Trust Fund may express state opinion as to title.

5. This permit does not relieve the permittee from liability for harm or injury to human health or welfare, animal, plant or aquatic life or property and penalties therefore caused by the construction or operation of this permitted source, nor does it allow the permittee to cause pollution in contravention of Florida Statutes and department rules, unless specifically authorized by an order from the department.

GENERAL CONDITIONS:

6. The permittee shall at all times properly operate and maintain the facility and systems of treatment and control (and related appurtenances) that are installed or used by the permittee to achieve compliance with the conditions of this permit, as required by department rules. This provision includes the operation of backup or auxiliary facilities or similar systems when necessary to achieve compliance with the conditions of the permit and when required by department rules.

7. The permittee, by accepting this permit, specifically agrees to allow authorized department personnel, upon presentation of credentials or other documents as may be required by law, access to the premises, at reasonable times, where the permitted activity is located or conducted for the purpose of:

a. Having access to and copying any records that must be kept under the conditions of the permit;

b. Inspecting the facility, equipment, practices, or operations regulated or required under this permit; and

c. Sampling or monitoring any substances or parameters at any location reasonably necessary to assure compliance with this permit or department rules.

Reasonable time may depend on the nature of the concern being investigated.

8. If, for any reason, the permittee does not comply with or will be unable to comply with any condition or limitation specified in this permit, the permittee shall immediately notify and provide the department with the following information:

a. a description of and cause of non-compliance; and

b. the period of noncompliance, including exact dates and times; or, if not corrected, the anticipated time the noncompliance is expected to continue, and steps being taken to reduce, eliminate, and prevent recurrence of the noncompliance.

GENERAL CONDITIONS:

The permittee shall be responsible for any and all damages which may result and may be subject to enforcement action by the department for penalties or revocation of this permit.

9. In accepting this permit, the permittee understands and agrees that all records, notes, monitoring data and other information relating to the construction or operation of this permitted source, which are submitted to the department, may be used by the department as evidence in any enforcement case arising under the Florida Statutes or department rules, except where such use is proscribed by Sections 403.73 and 403.111, Florida Statutes.

10. The permittee agrees to comply with changes in department rules and Florida Statutes after a reasonable time for compliance, provided however, the permittee does not waive any other rights granted by Florida Statutes or department rules.

11. This permit is transferable only upon department approval in accordance with Florida Administrative Code Rules 17-4.12 and 17-30.30, as applicable. The permittee shall be liable for any non-compliance of the permitted activity until the transfer is approved by the department.

12. This permit is required to be kept at the work site of the permitted activity during the entire period of construction or operation.

13. This permit also constitutes:

( ) Determination of Best Available Control Technology (BACT)
( ) Determination of Prevention of Significant Deterioration (PSD)
( ) Compliance with New Source Performance Standards.

14. The permittee shall comply with the following monitoring and record keeping requirements:

a. Upon request, the permittee shall furnish all records and plans required under department rules. The retention period for all records will be extended automatically, unless otherwise stipulated by the department, during the course of any unresolved enforcement action.

GENERAL CONDITIONS:

b. The permittee shall retain at the facility or other location designated by this permit records of all monitoring information (including all calibration and maintenance records and all original strip chart recordings for continuous monitoring instrumentation), copies of all reports required by this permit, and records of all data used to complete the application for this permit. The time period of retention shall be at least three years from the date of the sample, measurement, report or application unless otherwise specified by department rule.

c. Records of monitoring information shall include:

- the date, exact place, and time of sampling or measurements;
- the person responsible for performing the sampling or measurements;
- the date(s) analyses were performed;
- the person responsible for performing the analyses;
- the analytical techniques or methods used; and
- the results of such analyses.

15. When requested by the department, the permittee shall within a reasonable time furnish any information required by law which is needed to determine compliance with the permit. If the permittee becomes aware that relevant facts were not submitted or were incorrect in the permit application or in any report to the department, such facts or information shall be submitted or corrected promptly.

SPECIFIC CONDITIONS:

1. Annual hours of operation are 8760.

2. Maximum annual allowable VOC (volatile organic compounds) emissions shall not exceed 25,509 pounds.

3. The VOC allowable emission limiting standard, not to be exceeded, is 3.5 pounds per gallon of coating (0.42 kilograms per liter), less water, delivered to a coating applicator, averaged across all lines, and on a daily basis.

SPECIFIC CONDITIONS:

4. EPA Method 24 shall be required for each surface coating material (paint) to determine volatile matter content, water content, density, volume solids, and weight solids. The paint shall be tested as applied and should only be required again if the formula, as applied, changes.

5. The applicant shall maintain accurate record-keeping of all paints and solvents used in operation of the 4 spray booths. The applicant shall submit annual reports to the St. Johns River District office as proof of compliance with permit VOC limits, commencing one year after the operating permit is issued and annually thereafter.

6. During those times when the facility is being used for spray painting of other related activities where solvent emissions can escape to the atmosphere, the doors shall be closed. Additional precautions, such as covering of solvent containers when not in use, shall be taken to prevent escape of VOC fugitive emissions.

7. The paint spray booth(s) shall not be operated unless the exhaust fan and abatement equipment are functioning properly.

8. Compliance with the conditions of the permit shall be determined through visual inspection by a Department representative and submittal of paint/solvent records as stated in Condition No. 5. The applicant shall furnish the Department a 30 day notice prior to testing.

9. No person shall cause, suffer, allow or permit the discharge of air pollutants which cause or contribute to an objectionable odor pursuant to FAC Rule 17-2.620(2). Objectionable odor is defined as any odor present in the outdoor atmosphere which by itself or in combination with other odors, is or may be harmful or injurious to human health or welfare, which unreasonably interferes with the comfortable use and enjoyment of life or property, or which creates a nuisance pursuant to FAC Rule 17-2.100(111). Odor is defined as a sensation resulting from stimulation of the human olfactory organ pursuant to FAC Rule 17-2.100(112).

10. The applicant shall report any delays in contruction and completion of this modification to the Department's St. Johns River District office.

SPECIFIC CONDITIONS:

11. The construction shall reasonably conform to the plans and schedule submitted in the application. If the applicant is unable to complete construction on schedule, he must notify the department in writing 60 days prior to the expiration of the construction permit and submit a new schedule and request for an extension of the construction permit. (Rule 17-2.09, Florida Administrative Code)

To obtain a permit to operate, the applicant must demonstrate compliance with the conditions of the construction permit and submit a complete application for an operating permit, including the application fee, along with compliance test results and Certificate of Completion, to the department's District office 90 days prior to the expiration date of the construction permit. The permittee may continue to operate in compliance with all terms of the construction permit until its expiration date. Operation beyond the construction permit expiration date requires a valid permit to operate. (Rules 17-2.22 and 17-4.23, Florida Administrative Code)

If the construction permit expires prior to the applicant requesting an extension or obtaining a permit to operate, then all activities at the project must cease and the applicant must apply for a new permit to construct which can take up to 90 days to process a complete application. (Rule 17-4.10, Florida Administratiave Code)

12. Upon obtaining an operating permit, the applicant will be required to submit periodic test reports on the actual operation and emissions of the facility, such as paint analyses obtained by using EPA Method 24, paint vendors specifications to show concurrence with paint analyses performed, and the annual operating report which contains the quantified and qualified actual pollutant emissions from the facility.

13. The source shall comply with the provisions and requirements of the general conditions.

PERMITTEE: FMC Corporation

Permit Number: AC 48-098145
Expiration Date: June 30, 1987

SPECIFIC CONDITIONS:

14. The grit blaster (AC48-48485) is a self contained unit of operation such that there are no particulate matter emissions and visible emissions. Consequently, all construction, modification and operation permits shall be surrendered to the department.

Issued this 12 day of September 1985

STATE OF FLORIDA DEPARTMENT OF
ENVIRONMENTAL REGULATION

Victoria J. Tschinkel

VICTORIA J. TSCHINKEL, Secretary

____ pages attached.

State of Florida
DEPARTMENT OF ENVIRONMENTAL REGULATION

INTEROFFICE MEMORANDUM

For Routing To District Offices And/Or To Other Than The Addressee

To: _____ Loctn.: _____
To: _____ Loctn.: _____
To: _____ Loctn.: _____
From: _____ Date: _____
Reply Optional [ ] Reply Required [ ] Info. Only [ ]
Date Due: _____ Date Due: _____

TO: Victoria J. Tschinkel

FROM: for Clair Fancy

DATE: September 10, 1985

SUBJ: Approval of Attached Air Construction Permit

Attached for your approval and signature is one Air Construction Permit to FMC Corporation, Airline Equipment Division for the modification of three existing paint spray booths and the construction of one new paint spray booth at the applicant's existing facility in Orange County, Florida.

Day 90, after which the permit would be issued by default, is September 19, 1985.

The Bureau recommends your approval and signature.

CF/pa

Attachment

→ PS/25

Check Sheet

Company Name: FMC Corp.
Permit Number: AC 48-098145
PSD Number:
County:
Permit Engineer:
Others involved:

Application:
- [ ] Initial Application
- [x] Incompleteness Letters
- [x] Responses
- [ ] Final Application (if applicable)
- [ ] Waiver of Department Action
- [ ] Department Response
- [ ] Other

Intent:
- [x] Intent to Issue
- [x] Notice to Public
- [x] Technical Evaluation
- [ ] BACT Determination
- [x] Unsigned Permit
- [ ] Correspondence with:
  - [ ] EPA
  - [ ] Park Services
  - [ ] County
  - [ ] Other
- [x] Proof of Publication
- [ ] Petitions - (Related to extensions, hearings, etc.)
- [ ] Other

Final Determination:
- [x] Final Determination
- [x] Signed Permit
- [ ] BACT Determination
- [ ] Other

missing att 5 of Final

Post Permit Correspondence:
- [x] Extensions
- [ ] Amendments/Modifications
- [ ] Response from EPA
- [ ] Response from County
- [ ] Response from Park Services
- [ ] Other

STATE OF FLORIDA

DEPARTMENT OF ENVIRONMENTAL REGULATION

TWIN TOWERS OFFICE BUILDING
2600 BLAIR STONE ROAD
TALLAHASSEE, FLORIDA 32301-8241

BOB GRAHAM
GOVERNOR

VICTORIA J. TSCHINKEL
SECRETARY

September 4, 1986

CERTIFIED MAIL - RETURN RECEIPT REQUESTED

Mr. Jerry C. Sibley
FMC Corporation
Box 13400
Orlando, Florida 32859

Dear Mr. Sibley:

In accordance with the settlement reached between FMC Corporation and the department in OGC Case No. 85-1150, the expiration date of Permit No. AC 48-098145 is hereby extended from June 30, 1987 to June 30, 1988.

This letter must be attached to your construction permit and shall be made a part of the permit.

Sincerely,

Victoria J. Tschinkel
Secretary

VJT/dlw

cc: T. Sawicki
G. Early

DER
SEP 12 1986
BAQM

State of Florida
DEPARTMENT OF ENVIRONMENTAL REGULATION

Interoffice Memorandum

FOR ROUTING TO OTHER THAN THE ADDRESSEE

To: _____ Loctn: _____
To: _____ Loctn: _____
To: _____ Loctn: _____
From: _____ Date: _____

TO: Bill Thomas

FROM: Gary Early EGE

RE: FMC Corporation Air Construction Permit

DATE: August 22, 1986

On June 18, 1986, I requested that FMC Corporation Permit No. AC48-098145 be extended by one year, from June 30, 1987, to June 30, 1988. I have attached a copy of the original memo. I received an inquiry into the status of the extension from FMC's attorney during a hearing held yesterday. Please let me know what's going on with the extension as soon as possible so I may forward that information to FMC.

cc: Clair Fancy

DER
AUG 25 1986
BAQM

State of Florida
DEPARTMENT OF ENVIRONMENTAL REGULATION

Interoffice Memorandum

FOR ROUTING TO OTHER THAN THE ADDRESSEE

To: _____ Loc'n: _____
To: _____ Loc'n: _____
To: _____ Loc'n: _____
From: _____ Date: _____

TO: Clair Fancy
Bill Thomas

FROM: E. Gary Early EGE

DATE: June 18, 1986

RE: FMC Corporation - Permit No. AC48-098145

As you are aware, FMC Corp. has appealed the above permit to the District Court of Appeal. Since that time, efforts have been made to settle the case by agreeing to an automatic extension of the permit, pending issuance of the operating permit. The permit would be extended provided an application was submitted along with satisfactory compliance test results. Concerns were raised by Bill Thomas regarding the agreement to an automatic extension and it was determined that an extension of the expiration date of the current permit by one year would be more appropriate.

Based upon those conversations I have settled the FMC appeal by agreeing to the one year extension of the expiration date, from June 30, 1987 to June 30, 1988. Therefore, please issue a modification of FMC's permit, No. AC48-098145, extending the expiration date to June 30, 1988.

If you need further information, please call.

JOB ASSIGNMENT

TO: Bill Thomas No. _____

FROM: C. Fancy Date Due 9/3

DATE: 8/26 Status Report(s) Due _____

Please accomplish the following job assignment by the date indicated and provide status reports if applicable.

Please write extention letter for VT Signature extending FMC Corp permit AC48 048145 till 6/30/88. Send transmittal to Vicki, thru Gary Early. See attached request

Done — Unnecessary since permit is on work which will replace the one extended long before expiration without extension — Bill Dodd

BT

Date Completed _____ _____ initials

If you have any questions or problems meeting the due date, please see me as soon as possible.

CF/dt

White Copy - Addressee
Canary Copy - Return to CF upon completion
Gold - _____
Pink - File

FMC Corporation

Airline Equipment Division
7300 Presidents Drive
Box 13400
Orlando Florida 32859
305 851 3377

FMC

October 22, 1985

Mr. C. H. Fancy, P.E.
Deputy Chief
Bureau of Air Quality Management
2600 Blair Stone Road
Tallahassee, FL 32301-8241

Dear Mr. Fancy:

The FMC Corporation, Airline Equipment Division (AED), located in Orlando, Florida is in receipt of air permit number AC48-098145. This permit authorizes the operation of three existing paint spray booths and the construction of one new paint spray booth at our existing facility.

We are appreciative of the final approval of a permit that enables FMC AED to meet simultaneously production, marketing, and environmental requirements and appreciate the efforts the Florida Department of Environmental Regulations has put into processing the application.

It is our understanding, after review of the permit specific condition #5, that the next annual operations report for this facility will be due in September 1986. As you will recall the last annual operations report was for the year ending December 31, 1984.

If your understanding of the permit condition is different than ours please contact Larry McIntyre (Manufacturing Manager) or Russell Simmons at the above address.

Sincerely,

Marshall N. Gordon
Business Manager

cc:L.McIntyre, FMC AED
L.Foster, FMC AED
R.Simmons, FMC AED
D.Dube, FMC EPD

Bill T

Bruce
F/I & file
Send copy to
Tom Sawicki
sent BT
11/13
DA

STATE OF FLORIDA

DEPARTMENT OF ENVIRONMENTAL REGULATION

DER

SEP 17 1985

BAQM

ST. JOHNS RIVER DISTRICT
3319 MAGUIRE BOULEVARD
SUITE 232
ORLANDO, FLORIDA 32803-3767

September 16, 1985

OSJ-AP-85-0388

Larry E. McIntyre
Manufacturing Manager
FMC Corporation
Airline Equipment Division
7300 Presidents Drive
Orlando, Florida 32809

Dear Mr. McIntyre:

Orange County - AP
FMC Corporation - Three Paint Spray Booths
Permit #AO48-70342

The department is in receipt of your letter dated August 1985. We will continue to respond to your letters as expeditiously as possible.

At the present time this case is under enforcement for previous non-compliances with specific conditions numbers 6,7 & 8. Any future correspondence on this permit should be directed to our enforcement section.

It has already been clearly stated in our letter of June 21, 1985 that your weighted averaging procedure for obtaining VOC's per gallon of coating (less water) is not permitted and therefore cannot be used for demonstrating compliance with the Ract Rule 17-2.650(1)(f)14 F.A.C. Your continued assumption that this source is in compliance with the DER Rules is contradictory to the above referenced letter from the Department.

If there are any further questions please call Mr. Suresh Chandnani at 305-894-7555 or write to me at the above address.

Sincerely,

Charles M. Collins

Charles M. Collins
District Manager

CMC:scm
cc: Enforcement - George Gionis
John Bateman - OCPCD
Bill THomas - BAQM, Tally.

DEPARTMENT OF ENVIRONMENTAL REGULATION

ROUTING AND TRANSMITTAL SLIP

ACTION NO

ACTION DUE DATE

		Initial / Date
1.	TO: (NAME, OFFICE, LOCATION) Bill ~~Thomas~~ BT	
2.	BFQM, Tally	
	Ed Svec —	
3.	Note signature block —	
	Seems good work is rewarded.	
4.		

REMARKS:

INFORMATION

- [ ] Review & Return
- [ ] Review & File
- [ ] Initial & Forward
- [ ]

DISPOSITION

- [ ] Review & Respond
- [ ] Prepare Response
- [ ] For My Signature
- [ ] For Your Signature
- [ ] Let's Discuss
- [ ] Set Up Meeting
- [ ] Investigate & Report
- [ ] Initial & Forward
- [ ] Distribute
- [ ] Concurrence
- [ ] For Processing
- [ ] Initial & Return

FROM: C. Collins

DATE 9/16/85

PHONE

FMC Corporation

Airline Equipment Division
7300 Presidents Drive
Box 13400
Orlando Florida 32859
305 851 3377

FMC

August 15, 1985

Certified Mail
RETURN RECEIPT REQUESTED

State of Florida
Department of Environmental Regulation
Bureau of Air Quality Management
2600 Blair Stone Road
Tallahassee, FL 32301-8241

Attention: Mr. Bill Thomas

RE: Permit No. AC48-098145
Four Paint Spray Booths

Gentlemen:

Comment is hereby submitted regarding the proposed action of the Florida Department of Environmental Regulation (DER) in issuance of permit to construct No. AC 48-098145 for the FMC Corporation, Airline Equipment Division (AED) facility, 7300 Presidents Drive, Orlando, Florida. The reference permit is for modification of three existing paint spray booths by increasing the hours of operation and for construction/installation of a fourth paint spray booth. We request that the permit to be issued by DER be modified to incorporate the changes requested in these comments.

1. The proposed permit expiration date is December 31, 1986. We request that the date for completion of construction, i.e. installation of the fourth paint spray booth, be extended six months to June 30, 1987 to provide a longer transition time for the additions/changes to the product lines to be manufactured and the subsequent installation of the fourth paint spray booth.

2. The grit blaster is shown as emitting particulates in Tables 1 and 3 of the Technical Evaluation and Preliminary Determination. We call your attention to the fact that the grit blaster operates with total air recirculation, there is no emission from that equipment. We request that the grit blaster be omitted from those tables.

3. Electrostatic paint spray guns are described as the standard equipment used in the paint spray booths in paragraph two of page one in the proposed permit. The electostatic paint spray guns are also described in the Technical Evaluation and Preliminary Determination section I.C. as a process and control means to minimize the particulate matter (and minimize the VOC emission) from the booths. FMC has found it necessary to change from electrostatic paint spray guns to airless/

To Bruce

Date 30 Time 3:56

WHILE YOU WERE OUT

M Russ Simmons

of 7 MC

Phone 305 851-3377
Area Code Number Extension

ex 2035

X	TELEPHONED	X	PLEASE CALL
	CALLED TO SEE YOU		WILL CALL AGAIN
	WANTS TO SEE YOU		URGENT
	RETURNED YOUR CALL		

Message @ 4:15
change permit condition

Operator

air-assisted spray guns due to unacceptable quality problems when electrostatic spray guns are used in the application of the protective paint coating on the frame-like structures of the equipment produced by the FMC AED plant. We also experienced many failures of components for the electrostatic spray system which drastically reduced the paint transfer efficiency and caused excess maintenance. We have investigated alternative spray paint application devices and determined that the airless/air-assisted spray guns are the most suitable to operate reliably and to provide a reasonably high transfer efficiency of 65 percent which is clearly superior to conventional air atomized spray guns.

The conversion to airless/air-assisted spray guns as a replacement for electrostatic spray guns was described in the December 17, 1984 letter transmitting FMC's permit application. That letter stated (in part):

> "Another significant factor in the amount of paint applied, and therefore, the quantity of VOC emissions, was the use of electrostatic spray equipment to increase the efficiency of paint transfer. Experience has shown two serious deficiencies in the use of electrostatic equipment for the highly complex frame-like components from which the loaders are constructed. Firstly, the Faraday effect creates an electric field at the corners where frame members are joined and prevents adequate application of paint in those areas when electrostatic spray equipment is used. Secondly, the mechanical reliability of the electrostatic system components, including but not limited to spray guns, has been most unsatisfactory. Obtainment of replacement parts has been particularly difficult.
>
> As a result of these operational problems with the electrostatic spray equipment, the enclosed application projects paint usage based on a new type of spray gun which is simpler and, we believe, more reliable than its electrostatic counterpart, and which also has a transfer efficiency superior to that of conventional spray equipment."

Attachment No. 1 to this letter shows the calculation of the projected particulate matter emissions utilizing the 65 percent efficiency of the airless/air-assisted spray guns. We request that you incorporate this change into the permit. We further request that FMC be allowed, by permit, to use any alternate spray application equipment which provides equivalent, 65 percent, or higher transfer efficiencies for the paint solids.

4. General Condition No. 15 states, in part, "If the permittee becomes aware that relevant facts were not submitted...". We request that the word "material" be substituted for "relevant" which more clearly defines the requirement as dealing with facts which would have a substantive effect.

5. Specific Condition No. 2 specifies only the maximum annual emission limit for VOC. Therefore, it is FMC's understanding that, as requested in the permit application, we are not limited to a daily emission

rate. If this understanding is in error, please advise us as soon as possible in order that we may provide any additional, appropriate comment.

6. Specific Condition No. 8 specifies that compliance "...shall be determined through visual inspection...and submittal of paint/solvent records..." Since there is no requirement for emissions testing, we request that the last sentence of that condition be removed to eliminate the requirement for a 30 day notice prior to testing.

7. Specific Condition No. 9 refers to odors. We propose a clarifying wording change as shown by the following underlined portion of the statement; "Objectionable odors shall not be allowed off plant property as required by Florida Administrative Code Rule 17-2.620(2).

8. Specific Condition No. 11 addresses the submission of an application for an operating permit and the extentions of our permit to construct pending the issuance of an operating permit. We request that the last sentence of Specific Condition 11 be replaced by the following underlined wording to more clearly state that we may continue to operate under the terms of the construction permit until the operating permit is issued; "this construction permit will remain in effect beyond its expiration date if the applicant has submitted an application for an operating permit in accordance with this condition and the Deptartment has not taken final action on the application prior to the expiration of this construction permit."

9. Specific Condition No. 12 wording suggests that some sort of periodic tests on the facility must be conducted. We propose that the wording be changed as shown by the additional underlined words; "Upon obtaining an operating permit, the applicant will be required to submit periodic test reports on paint analyses and reports on the actual operation and calculated emissions of the facility.

If you require any additional information, or wish to discuss these comments, please contact Russell Simmons or me.

Sincerely,

Larry E. McIntyre
Manufacturing Manager

kbg
cc: Russell Simmons, FMC AED
James T. Show, Orange county EPD
Dave Dube, FMC EPD Philadelphia

ATTACHMENT I

PARTICULATE MATTER CALCULATION

The projected Particulate Matter emissions from the four paint spray booths is calculated below. These calculations are based on a paint transfer efficiency of 65% and a capture efficiency of 90% from use of a paint booth water trap system.

$$\text{PRIMER: } \frac{(2{,}549 \text{ gal})(9.40 \text{ lb solids/gal}^*)}{(2{,}000 \text{ lb/ton})} = 11.98 \text{ ton solid}$$

$$\text{TOPCOAT: } \frac{(5{,}176 \text{ gal})(6.30 \text{ lb solids/gal}^*)}{(2{,}000 \text{ lb/ton})} = 16.30 \text{ ton solid}$$

TOTAL PROJECTED PARTICULATE EMISSIONS (4 Paint Booths):

$$(11.98 + 16.30)(1 - 0.65)(1 - 0.90) = 0.99 \text{ ton/yr}$$

NET INCREASE:

$$0.99 \text{ ton/yr} - \frac{301.7 \text{ lb/Yr}}{2{,}000 \text{ lb/ton}} = 0.84 \text{ tons/yr } **$$

* Lbs solids/gallon is derived from data in Section V1 (Total Process Input Rate and Product Weight) of the submitted permit application:

Primer:
(12.3 lb/gal - 2.90 lb VOC/gal) = 9.40 lb solids/gal

Topcoat:
(9.8 lb/gal - 3.50 lb VOC/gal) = 6.30 lb solids/gal

** 301.7 lb/year (0.15 ton/yr) is the previous reported emissions from the 3 existing paint spray booths, based on the Annual Operation Report for calendar year 1983.

Delivered 1/3/85

FMC Corporation

December 17, 1984

FMC

Mr. James T. Show
Orange County Environmental Protection Department
2002 East Michigan Street
Orlando, FL 32806

Re: Application for Modification to Air Permit
No. A048-790342 for Paint Spray Booths at
FMC Corporation Airline Equipment Division
Orlando, Florida

Dear Mr. Show:

As we discussed in the November 16, 1984 meeting with you and Mr. Nester, the FMC Corporation Airline Equipment Division facility at 7300 Presidents Drive, Orlando, Florida is submitting the enclosed application for modification of Air Permit Number A048-70342 which applies to the operation of four paint spray booths at this facility.

The modifications requested herein are essential to: a) meet the changing product requirements caused by economic and business conditions in the worldwide airline equipment market, b) to address the impact that changes in paint type, paint usage, and paint application equipment (such changes being made to meet both the Florida Reasonably Achievable Control Technology [RACT] regulatory requirements and the paint quality/durability requirements imposed by our customers), c) to allow for the daily and monthly fluctuation of volatile organic compounds (VOC) emissions which occur due to the daily and monthly intermittent cycle of spray painting a few large pieces of airline equipment loaders on schedules set by the customer demand, and d) to increase the hours of operation to enable the facility to operate three shifts per day and seven days per week. These revisions are described more fully below.

DER
SEP 3 1985
BAQM

DER
AUG 3 1985
BAQM

BEST AVAILABLE COPY

FEDERAL EXPRESS

PLEASE COMPLETE ALL INFORMATION IN THE 5 BLOCKS OUTLINED IN ORANGE
SEE BACK OF FORM FOR COMPLETE PREPARATION INSTRUCTIONS

AIRBILL NUMBER 5118064411

GIVEN TO RECIPIENT AT DELIVERY

YOUR FEDERAL EXPRESS ACCOUNT NUMBER 1644-0456-7

DATE 8/30/85

FROM (Your Name) R. SIMMONS

COMPANY FMC CORPORATION

DEPARTMENT/FLOOR NO.

STREET ADDRESS 7300 PRESIDENTS DRIVE

CITY COLANDER STATE FL ZIP 32809

AIRBILL NO. 5118064411

TO (Recipient's Name) MR. BRUCE MITCHELL

If Hold For Pick-Up or Saturday Delivery, Recipient's Phone Number

COMPANY STATE OF FLORIDA
DEPARTMENT OF ENVIRONMENTAL REGULATION

DEPARTMENT/FLOOR NO.

STREET ADDRESS (P.O. BOX NUMBERS ARE NOT DELIVERABLE) BUREAU OF AIR QUALITY MANAGEMENT
2600 BLAIR STONE ROAD

CITY TALLAHASSEE STATE FLORIDA ZIP ACCURATE ZIP CODE REQUIRED FOR OVERNIGHT DELIVERY 32301 8324

IN TENDERING THIS SHIPMENT, SHIPPER AGREES THAT F.E.C. SHALL NOT BE LIABLE FOR SPECIAL, INCIDENTAL OR CONSEQUENTIAL DAMAGES ARISING FROM CARRIAGE HEREOF. F.E.C. DISCLAIMS ALL WARRANTIES, EXPRESS OR IMPLIED, WITH RESPECT TO THIS SHIPMENT. THIS IS A NON-NEGOTIABLE AIRBILL SUBJECT TO CONDITIONS OF CONTRACT SET FORTH ON REVERSE OF SHIPPER'S COPY. UNLESS YOU DECLARE A HIGHER VALUE, THE LIABILITY OF FEDERAL EXPRESS CORPORATION IS LIMITED TO $100.00. FEDERAL EXPRESS DOES NOT CARRY CARGO LIABILITY INSURANCE.

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☐ Cash in Advance Account Number/Credit Card Number

FEDERAL EXPRESS USE

FREIGHT CHARGES

DECLARED VALUE CHARGES

SERVICES CHECK ONLY ONE BOX

PRIORITY 1
1 ☐ OVERNIGHT LETTER
6 ☐ (Up to 2 oz.)
(OVERNIGHT PACKAGES) (Up to 70 LBS.)
COURIER PAK 7 ☐
2 ☐ OVERNIGHT ENVELOPE (Up to 2 LBS.)
8 ☒
3 ☐ OVERNIGHT BOX (Up to 5 LBS.)
9 ☐
4 ☐ OVERNIGHT TUBE (Up to 5 LBS.)

STANDARD AIR
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"OVERNIGHT" IS NEXT BUSINESS DAY (MONDAY THROUGH FRIDAY); TWO DAYS FROM ALASKA/HAWAII. SATURDAY DELIVERY AVAILABLE IN CONTINENTAL U.S. SEE "SPECIAL HANDLING."

DELIVERY AND SPECIAL HANDLING CHECK SERVICES REQUIRED

1 ☐ HOLD FOR PICK-UP AT FOLLOWING FEDERAL EXPRESS LOCATION SHOWN IN SERVICE GUIDE. RECIPIENT'S PHONE NUMBER IS REQUIRED.

2 ☒ DELIVERY
3 ☐ SATURDAY SERVICE REQUIRED See Reverse (Extra charge applies for delivery.)
4 ☐ RESTRICTED ARTICLES SERVICE (RA and Standard Air Packages only, extra charge)
5 ☐ SSS (Signature Security Service required, extra charge applies)
6 ☐ DRY ICE LBS
7 ☐ OTHER SPECIAL SERVICE
8 ☐
9 ☐

PACKAGES	WEIGHT	DECLARED VALUE	O/S
TOTAL	TOTAL	TOTAL	

RECEIVED AT
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☐ REGULAR STOP
☐ ON-CALL STOP
☐ F.E.C. LOC.

Federal Express Corporation Employee No. 3972

EMP. NO. DATE

☐ CASH RECEIVED ☐ RETURN SHIPMENT ☑ THIRD PARTY ☐ CHG. TO DEL. ☐ CHG. TO HOLD

AGT/PRO AGT/PRO

STREET ADDRESS

CITY STATE ZIP

RECEIVED BY (Signature) X

ADVANCE ORIGIN

ADVANCE DESTINATION

OTHER

TOTAL CHARGES

DATE/TIME For Federal Express Use 9/3 1645

DATE/TIME RECEIVED

F.E.C. EMPLOYEE NUMBER

PART #2041730751
FEC-S-0751 D/O/B
REVISION DATE 2/83 $
PRINTED U.S.A.

Mr. Mitchell -
Here is a copy of the 12/17/84 letter as req'd.

Russell Simmons

Airline equipment market conditions have changed significantly since the plant was constructed in 1982. The sales demand for containerized cargo loaders now being produced at our Orlando facility is much less than our original projections. As a consequence, FMC plans changes in the products manufactured at Orlando to meet current market requirements. The changes include the production of other airline ground support equipment including, but not limited to, baggage trailers, container trailers and belt loaders. Most of these items are now marketed by FMC and manufactured elsewhere. The additions to the product line will result in increased usage of paint and, therefore, increased VOC emissions. Ultimately one additional paint booth will be required. The predicted production to be attained by 1988, the expiration date of the current permit for the paint spray booths, and the predicted paint usage (and VOC emissions), are shown on the attached application.

The permit application filed in 1982 predicted paint usage based on information developed at our California plant with enamels and conventional paint spray equipment. Actual operating experience with medium solids polyurethane topcoat and water base epoxy primer, at Orlando, show more paint solids are required to attain an adequate paint coating. We now find that the quantity of paint applied to the airline loaders has increased by twenty percent. Thus the paint usage is greater than predicted in the 1982 permit application.

Another significant factor in the amount of paint applied, and therefore, the quantity of VOC emissions, was the use of electrostatic spray equipment to increase the efficiency of paint transfer. Experience has shown two serious deficiencies in the use of electrostatic equipment for the highly complex frame-like components from which the loaders are constructed. Firstly, the Faraday effect creates an electric field at the corners where frame members are joined and prevents adequate application of paint in those areas when electrostatic spray equipment is used. Secondly, the mechanical reliability of the electrostatic system components, including but not limited to spray guns, has been most unsatisfactory. Obtainment of replacement parts has been particularly difficult.

As a result of these operational problems with the electrostatic spray equipment, the enclosed application projects paint usage based on a new type of spray gun which is simpler and, we believe, more reliable than its electrostatic counterpart, and which also has a transfer efficiency superior to that of conventional spray equipment.

We also ask for your formal concurrence in the use of a weighted average pounds of VOC per gallon of coating, primer and topcoat, for determining compliance with the RACT rule. FMC has changed to a paint system consisting of both a water-base epoxy primer, which has the low VOC content of 2.9 pounds per gallon, and a medium-solids polyurethane topcoat which, on average, has a VOC content of 3.5 pounds per gallon of coating. The topcoat is applied in over twenty-five different customer matched colors with each color being used in small quantities of typically ten to twenty gallons each. Because each of the colors are custom matched for the airline ordering the equipment, and in light of the small quantities in which they are purchased, we have been unable to find a paint manufacturer which will supply each color in a formulation which does not exceed the RACT standard of 3.5 pounds of VOC per gallon of coating. Nonetheless, as was demonstrated in our August 31, 1984 letter to Mr. Sawicki at Florida DER, on a weighted average basis the topcoat paints which we use do in fact meet the RACT standard. We believe that the use of a weighted average for our primer and topcoat is consistent with the requirements of 17-2.650(1)(f) 14.b.(i)(B) and achieves the result intended by that rule.

In order to meet the daily and monthly fluctuations of paint application (and the resulting fluctuation in VOC emissions) FMC requests, as shown in the enclosed application for a modified permit, daily and monthly maximum VOC limits in addition to the annual VOC limit. The requested limits would allow FMC to paint a large vehicle in one day, and would allow the plant to paint varying numbers of units in a month to meet the fluctuating production requirements based on market demand.

Also, to make the most efficient use of the manufacturing facility and to maximize our ability to maintain a competitive market position with foreign competitors, we request that the operating hours allowed by the permit be increased to twenty-four hours per day and seven days a week.

If there are any questions regarding this permit application, please contact myself or Russell Simmons.

Sincerely,

Larry E. McIntyre
Manufacturing Manager

Attachment

bcc: D. Dube, FMC EPD
R. Simmons, FMC AED
M. Gordon, FMC AED

FMC Corporation

Airline Equipment Division
7300 Presidents Drive
Box 13400
Orlando Florida 32859
305 851 3377

FMC

August 7, 1985

CERTIFIED MAIL -
RETURN RECEIPT REQUESTED

Mr. C. H. Fancy, P.E.
Deputy Chief
Bureau of Air Quality Management
Department of Environmental Regulation
2600 Blair Stone Road
Tallahassee, Fl 32301-8241

RE: FMC Corporation, Airline Equipment Division
Proof of Publication (July 28, 1985)
Proposed Agency Action
Air Permit #AC 48-098145

Dear Mr. Fancy:

Enclosed is a copy of the Proof of Publication of the Notice of Proposed Agency Action for the FMC Corporation, Airline Equipment Division, Orlando, Florida. It was delivered to Florida DER, St. Johns River District on Tuesday, August 6, 1985. I was assured by the Orlando office that this proof of publication requirement could be handled locally and would be properly recorded. You can contact me at (305)851-3377, extension 2035 if you have any questions.

Sincerely,

Russell F. Simmons

Russell F. Simmons
Manufacturing Engineer

enclosure
cc: Bruce Mitchell, DER Tallahassee
Larry E. McIntyre, FMC Corp., Orlando
Dave Dube, FMC Corp., Philadelphia

FMC Corporation

Airline Equipment Division
7300 Presidents Drive
Box 13400
Orlando, Florida 32859
305 851 3377

FMC

August 6, 1985

HAND DELIVERED

State of Florida
Department of Environmental Regulations
3319 Maguire Blvd., Suite 232
Orlando, Fl 32803

RE: FMC Corporation, Airline Equipment Division
Proof of Publication (July 28, 1985)
Proposed Agency Action
Air Permit #AC 48-098145

Dear Sir or Madam:

Enclosed is the proof of publication of the Notice of Proposed Agency Action in the Orlando Sentinel legal advertising section as required by Florida Administrative Code Rule 17-103.150. The Notice of Proposed Agency Action is for Air Permit #AC 48-098145 for the FMC Corporation Airline Equipment Division located in Orlando, Florida.

Sincerely,

L E McIntyre

Larry E. McIntyre
Manufacturing Manager

enclosure

The Orlando Sentinel

Published Daily
Orlando, Orange County, Florida

ADVERTISING CHARGE $48.48 Paid

State of Florida } ss.
COUNTY OF ORANGE

Before the undersigned authority personally appeared Nancy A. Puglia, who on oath says that she is the Legal Advertising Representative of the Orlando Sentinel, a Daily newspaper published at Orlando, in Orange County, Florida; that the attached copy of advertisement, being a Proposed Agency Action in the matter of Permit to FMC Corporation, Airline Equipment Division in the Court, was published in said newspaper in the issues of July 28, 1985

Affiant further says that the said Orlando Sentinel is a newspaper published at Orlando, in said Orange County, Florida, and that the said newspaper has heretofore been continuously published in said Orange County, Florida, each Week Day and has been entered as second-class mail matter at the post office in Orlando, in said Orange County, Florida for a period of one year next preceding the first publication of the attached copy of advertisement; and affiant further says that he/she has neither paid nor promised any person, firm or corporation any discount, rebate, commission or refund for the purpose of securing this advertisement for publication in the said newspaper.

Nancy A Puglia

Sworn to and subscribed before me this 30th day of July A.D., 1985.

Virginia M Hollingsworth
Notary Public, State of Florida at Large

Seal

Notary Public
My Commission Expires July 13, 1989
Bonded Thru Brown & Brown, Inc. FORM NO. AD-262

State of Florida
Department of Environmental Regulation
Notice of Proposed Agency Action on Permit Application

The Department of Environmental Regulation gives notice of its intent to issue a permit to FMC corporation, Airline Equipment Division to modify three existing paint spray booths by increasing the hours of operation and to construct/install fourth paint spray booth at the applicant's facility located at 7300 Presidents Drive, Orlando, Orange County, Florida. A determination of best available control technology (BACT) was not required.

Persons whose substantial interests are affected by the Department's proposed permitting decision may petition for an administrative proceeding (hearing) in accordance with Section 120.57, Florida Statutes. The petition must conform to the requirements of Chapters 17-103 and 28-5, Florida Administrative Code, and must be filed (received) in the Office of General Counsel of the Department at 2600 Blair Stone Road, Twin Towers Office Building, Tallahassee, Florida 32301, within fourteen (14) days of publication of this notice. Failure to file a request for hearing within this time period shall constitute a waiver of any right such person may have to request an administrative determination (hearing) under Section 120.57, Florida Statutes.

If a petition is filed, the administrative hearing process is designed to formulate agency action. Accordingly, the Department's final action may be different from the proposed agency action. Therefore, persons who may not wish to file a petition may wish to intervene in the proceeding. A petition for intervention must be filed pursuant to Model Rule 28-5.207, Florida Administrative Code, at least five (5) days before the final hearing and be filed with the hearing officer if one has been assigned at the Division of Administrative Hearings, Department of Administration, 2009 Apalachee Parkway, Tallahassee, Florida 32301. If no hearing officer has been assigned, the petition is to be filed with the Department's Office of General Counsel, 2600 Blair Stone Road, Tallahassee, Florida 32301. Failure to petition to intervene within the allowed time frame constitutes a waiver of any right such person has to request a hearing under Section 120.57, Florida Statutes.

The application is available for public inspection during normal business hours, 8:00 a.m. to 5.00 p.m., Monday through Friday, except legal holidays, at:

Dept. of Environmental Regulation
St. Johns River District
3319-Maguire Blvd., Suite 232,
Orlando, Florida 32803

Dept. of Environmental Regulation
Bureau of Air Quality Management
2600 Blair Stone Road
Tallahassee, Florida 32301

Any person may send written comments on the proposed action to Mr. Bill Thomas at the department's Tallahassee address. All comments mailed within 30 days of the publication of this notice will be considered in the department's final determination

LS-117(10) Jul 28,1985

DER
AUG 12 1985
BAQM

FMC Corporation

Airline Equipment Division
7300 Presidents Drive
Box 13400
Orlando Florida 32859
SIMMONS

FMC

CERTIFIED

P 632 592 556

MAIL

ORLANDO FLORIDA U.S. POSTAGE

MR. C.H. FANCY, P.E.
DEPUTY CHIEF
BUREAU OF AIR QUALITY MANAGEMENT
DEPARTMENT OF ENVIRONMENTAL REG.
2600 BLAIR STONE ROAD
TALLAHASSEE, FL 32301-8241

P 408 530 281

RECEIPT FOR CERTIFIED MAIL

NO INSURANCE COVERAGE PROVIDED—
NOT FOR INTERNATIONAL MAIL

(See Reverse)

Sent to Mr. Larry E. McIntyre	
Street and No.	
P.O., State and ZIP Code	
Postage	$
Certified Fee	
Special Delivery Fee	
Restricted Delivery Fee	
Return Receipt Showing to whom and Date Delivered	
Return Receipt Showing to whom, Date, and Address of Delivery	
TOTAL Postage and Fees	$
Postmark or Date 7/19/85	

PS Form 3800, Feb. 1982

PS Form 3811, July 1983

SENDER: Complete items 1, 2, 3 and 4.

Put your address in the "RETURN TO" space on the reverse side. Failure to do this will prevent this card from being returned to you. The return receipt fee will provide you the name of the person delivered to and the date of delivery. For additional fees the following services are available. Consult postmaster for fees and check box(es) for service(s) requested.

1. ☐ Show to whom, date and address of delivery.
2. ☐ Restricted Delivery.

3. Article Addressed to:
Mr. Larry E. McIntyre
FMC Corporation
7300 Presidents Drive
Orlando, Florida 32809

4. Type of Service:
☐ Registered ☐ Insured
XX Certified ☐ COD
☐ Express Mail

Article Number
P408 530 281

Always obtain signature of addressee or agent and DATE DELIVERED.

5. Signature – Addressee
X

6. Signature – Agent
X

7. Date of Delivery

8. Addressee's Address *(ONLY if requested and fee paid)*

DOMESTIC RETURN RECEIPT

STATE OF FLORIDA

DEPARTMENT OF ENVIRONMENTAL REGULATION

TWIN TOWERS OFFICE BUILDING
2600 BLAIR STONE ROAD
TALLAHASSEE, FLORIDA 32301-8241

BOB GRAHAM
GOVERNOR

VICTORIA J. TSCHINKEL
SECRETARY

July 17, 1985

CERTIFIED MAIL-RETURN RECEIPT REQUESTED

Mr. Larry E. McIntyre
Manufacturing Manager
FMC Corporation
Airline Equipment Division
7300 Presidents Drive
Orlando, Florida 32809

Dear Mr. McIntyre:

Attached is one copy of the Technical Evaluation and Preliminary Determination, and proposed permit to modify three paint spray booths and construct/install a fourth paint spray booth at your facility in Orlando, Orange County, Florida.

Before final action can be taken on your draft permit, you are required by Florida Administrative Code Rule 17-103.150 to publish the attached Notice of Proposed Agency Action in the legal advertising section of a newspaper of general circulation in Orange County no later than fourteen days after receipt of this letter. The department must be provided with proof of publication within seven days of the date the notice is published. Failure to publish the notice may be grounds for denial of the permit.

Please submit, in writing, any comments which you wish to have considered concerning the department's proposed action to Mr. Bill Thomas of the Bureau of Air Quality Management.

Sincerely,

C. H. Fancy, P.E.
Deputy Chief
Bureau of Air Quality
Management

CHF/pa
Attachments
cc: Joseph L. Tessitore, P.E., Cross/Tessitore & Associates
Suresh Chandnani, DER St. Johns River District

State of Florida
Department of Environmental Regulation
Notice of Proposed Agency Action
on Permit Application

The Department of Environmental Regulation gives notice of its intent to issue a permit to FMC Corporation, Airline Equipment Division to modify three existing paint spray booths by increasing the hours of operation and to construct/install a fourth paint spray booth at the applicant's facility located at 7300 Presidents Drive, Orlando, Orange County, Florida. A determination of best available control technology (BACT) was not required.

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The application is available for public inspection during normal business hours, 8:00 a.m. to 5:00 p.m., Monday through Friday, except legal holidays, at:

Dept. of Environmental Regulation
St. Johns River District
3319 Maguire Blvd., Suite 232
Orlando, Florida 32803

Dept. of Environmental Regulation
Bureau of Air Quality Management
2600 Blair Stone Road
Tallahassee, Florida 32301

Any person may send written comments on the proposed action to Mr. Bill Thomas at the department's Tallahassee address. All comments mailed within 30 days of the publication of this notice will be considered in the department's final determination.

RULES OF THE ADMINISTRATIVE COMMISSION
MODEL RULES OF PROCEDURE
CHAPTER 28-5
DECISIONS DETERMINING SUBSTANTIAL INTERESTS

28-5.15 Requests for Formal and Informal Proceedings

(1) Requests for proceedings shall be made by petition to the agency involved. Each petition shall be printed typewritten or otherwise duplicated in legible form on white paper of standard legal size. Unless printed, the impression shall be on one side of the paper only and lines shall be double spaced and indented.

(2) All petitions filed under these rules should contain:

(a) The name and address of each agency affected and each agency's file or identification number, if known;

(b) The name and address of the petitioner or petitioners;

(c) All disputed issues of material fact. If there are none, the petition must so indicate;

(d) A concise statement of the ultimate facts alleged, and the rules, regulations and constitutional provisions which entitle the petitioner to relief;

(e) A statement summarizing any informal action taken to resolve the issues, and the results of that action;

(f) A demand for the relief to which the petitioner deems himself entitled; and

(g) Such other information which the petitioner contends is material.

BEFORE THE STATE OF FLORIDA
DEPARTMENT OF ENVIRONMENTAL REGULATION

In the Matter of an Application for Permit by:	)	
FMC Corporation Airline Equipment Division 7300 Presidents Drive Orlando, Florida 32809	)	DER File No. AC 48-098145

INTENT TO ISSUE

The Department of Environmental Regulation hereby gives notice of its Intent to Issue, and proposed order of issuance for, a permit pursuant to Chapter 403, Florida Statutes, for the proposed project as detailed in the application specified above. The Department is issuing this Intent to Issue for the reasons stated in the attached Technical Evaluation and Preliminary Determination.

The applicant, FMC Corporation, Airline Equipment Division, applied on January 10, 1985, to the Department of Environmental Regulation for a permit to modify three existing paint spray booths and construct/install a fourth booth at their existing facility in Orlando, Orange County, Florida.

The Department has permitting jurisdiction under Chapter 403, Florida Statutes and Florida Administrative Code Rules 17-2 and 17-4. The project is not exempt from permitting procedures. The applicant was officially notified by the Department that an air construction permit was required for the proposed work.

This intent to issue shall be placed before the Secretary for final action unless an appropriate petition for a hearing pursuant to the provisions of Section 120.57, Florida Statutes, is filed within fourteen (14) days from receipt of this letter or

publication of the public notice (copy attached) required pursuant to Rule 17-103.150, Florida Administrative Code, whichever occurs first. The petition must comply with the requirements of Section 17-103.155 and Rule 28-5.201, Florida Administrative Code (copy attached) and be filed pursuant to Rule 17-103.155(1) in the Office of General Counsel of the Department of Environmental Regulation at 2600 Blair Stone Road, Tallahassee, Florida 32301.

Petitions which are not filed in accordance with the above provisions are subject to dismissal by the Department. In the event a formal hearing is conducted pursuant to Section 120.57(1), all parties shall have an opportunity to respond, to present evidence and argument on all issues involved, to conduct cross-examination of witnesses and submit rebuttal evidence, to submit proposed findings of facts and orders, to file exceptions to any order or hearing officer's recommended order, and to be represented by counsel. If an informal hearing is requested, the agency, in accordance with its rules of procedure, will provide affected persons or parties or their counsel an opportunity, at a convenient time and place, to present to the agency or hearing officer, written or oral evidence in opposition to the agency's action or refusal to act, or a written statement challenging the grounds upon which the agency has chosen to justify its action or inaction, pursuant to Section 120.57(2), Florida Statutes.

If a petition is filed, the administrative hearing process is designed to formulate agency action. Accordingly, the Department's final action may be different from the proposed agency action. Therefore, persons who may not wish to file a petition, may wish to intervene in the proceeding. A petition for intervention must be filed pursuant to Model Rule 28-5.207 at least five (5) days before the final hearing and be filed with the hearing officer if one has been assigned at the Division of

publication of the public notice (copy attached) required pursuant to Rule 17-103.150, Florida Administrative Code, whichever occurs first. The petition must comply with the requirements of Section 17-103.155 and Rule 28-5.201, Florida Administrative Code (copy attached) and be filed pursuant to Rule 17-103.155(1) in the Office of General Counsel of the Department of Environmental Regulation at 2600 Blair Stone Road, Tallahassee, Florida 32301.

Petitions which are not filed in accordance with the above provisions are subject to dismissal by the Department. In the event a formal hearing is conducted pursuant to Section 120.57(1), all parties shall have an opportunity to respond, to present evidence and argument on all issues involved, to conduct cross-examination of witnesses and submit rebuttal evidence, to submit proposed findings of facts and orders, to file exceptions to any order or hearing officer's recommended order, and to be represented by counsel. If an informal hearing is requested, the agency, in accordance with its rules of procedure, will provide affected persons or parties or their counsel an opportunity, at a convenient time and place, to present to the agency or hearing officer, written or oral evidence in opposition to the agency's action or refusal to act, or a written statement challenging the grounds upon which the agency has chosen to justify its action or inaction, pursuant to Section 120.57(2), Florida Statutes.

If a petition is filed, the administrative hearing process is designed to formulate agency action. Accordingly, the Department's final action may be different from the proposed agency action. Therefore, persons who may not wish to file a petition, may wish to intervene in the proceeding. A petition for intervention must be filed pursuant to Model Rule 28-5.207 at least five (5) days before the final hearing and be filed with the hearing officer if one has been assigned at the Division of

Administrative Hearings, 2009 Apalachee Parkway, Tallahassee, Florida 32301. If no hearing officer has been assigned, the petition is to be filed with the Department's Office of General Counsel, 2600 Blair Stone Road, Tallahassee, Florida 32301. Failure to petition to intervene within the allowed time frame constitutes a waiver of any right such person has to request a hearing under Section 120.57, Florida Statutes.

Executed the 19 day of July, 1985, in Tallahassee, Florida.

STATE OF FLORIDA DEPARTMENT
OF ENVIRONMENTAL REGULATION

C. H. Fancy, P.E.
Deputy Chief
Bureau of Air Quality
Management

Copies furnished to:

Larry E. McIntyre
Manufacturing Manager
FMC Corporation
Airline Equipment Division
7300 Presidents Drive
Orlando, Florida 32809

Joseph L. Tessitore, P.E.
Cross/Tessitore & Associates, P.A.
4759 South Conway Road
Orlando, Florida 32812

Suresh Chandnani
Department of Environmental Regulation
St. Johns River District
3319 Maguire Blvd., Suite 232
Orlando, Florida 32803

CERTIFICATION

This is to certify that the foregoing Intent to Issue and all copies were mailed before the close of business on 19 Jul, 1985.

C. H. Fancy, P.E.
Deputy Chief
Bureau of Air Quality
Management
2600 Blair Stone Road
Tallahassee, Florida 32301

FILING AND ACKNOWLEDGEMENT
FILED, on this date, pursuant to §120.52(9), Florida Statutes, with the designated Department Clerk, receipt of which is hereby acknowledged.

Patricia G. Adams — Clerk
July 19, 1985 — Date

Technical Evaluation
and
Preliminary Determination

FMC Corporation
Orange County
Orlando, Florida

Permit Number:
AC 48-098145

Florida Department of Environmental Regulation

Bureau of Air Quality Management

Central Air Permitting

July 19, 1985

I. PROJECT DESCRIPTION

A. Applicant

FMC Corporation
Airline Equipment Division
7300 Presidents Drive
Orlando, Florida 32809

B. Project Description

The applicant intends to modify the existing facility by increasing the hours of operation of the three permitted paint spray booths and construct/install a fourth paint spray booth. The proposed project will result in an increase in both PM (particulate matter) and VOC (volatile organic compounds) emissions. The total facility annual maximum VOC emissions requested is 25,509 pounds.

The hours of operation requested are 24 hours per day, 7 days per week, and 52 weeks per year, which is equivalent to 8,760 hours per year.

The existing facility is located in an area designated nonattainment for the pollutant ozone. The UTM coordinates are zone 17, 459.8 km East and 3148.2 km North.

The Source Classification Codes for the proposed paint spray booth are 4-02-001-01 and 4-02-006-01.

C. Process and Controls

The facility manufactures airline ground support equipment, which is sold to commercial airlines world-wide for use in loading and unloading containerized cargo to and from airplanes. This equipment is built using mild steel structures and components which are welded, assembled, and prime painted with a water-based epoxy primer. After final assembly and testing, each finished loader is topcoated with a high-gloss polyurethane topcoat paint.

Additionally, the facility will begin to process airline ground support equipment such as belt loaders and baggage/ container trailers.

VOC from the paint spray booths will be controlled by crew efficiency and the use of low solvent coatings where available. PM emissions will be controlled by the use of electrostatic spray guns, which provide a 75% transfer efficiency. An additional control system, a water trap, will provide a 90% capture efficiency to the 25% of coating material (PM) not transferred by the electrostatic operation.

The facility will control the type and quantity of paints applied, using material balance methods, to ensure compliance with the RACT limiting standard. Daily compliance will be controlled by specifying a paint allotment based on the usage (mixture) of primer and topcoat paints. Written records will monitor daily compliance. The record will show daily and cumulative (year to date) paint usage and, based on VOC analyses of paints (as applied), the daily and cumulative VOC emissions. That information will be monitored routinely by a representative of the Manufacturing Manager who is the permit signatory.

II. Rule Applicability

The proposed project is subject to preconstruction review under the provisions of Chapter 403, Florida Statutes, and Florida Administrative Code (FAC) Rules 17-2 and 17-4.

The application was complete May 20, 1985.

The existing facility is located in Orange County, which is an area designated nonattainment for the pollutant ozone pursuant to FAC Rule 17-2.410(1)(b).

The existing facility emits particulate matter (PM) and volatile organic compounds (VOC), which are defined according to FAC Rules 17-2.100(121) and 17-2.100(179), respectively. The following table reflects the existing facility's potential pollutant emissions:

Table 1

Existing Facility Source(s)	Potential Pollutant Emissions (lbs/yr) PM	VOC
Grit Blaster	707.2	
Hydraulic Tube Cleaner*		5751.2
3 Paint Spray Booths	301.7	12,597.0
Net Total:	1008.9 (0.50 TPY)	12,597.0 (6.30 TPY)

* Has been removed from service and dismantled

As reflected in Table 1, the existing facility is a minor facility in accordance with FAC Rule 17-2.100(103).

The proposed project will result in an increase in both PM and VOC emissions. The projected potential pollutant emissions from the proposed project are reflected in the following table:

Table 2

Source(s)	Increase in Potential Pollutant Emissions	
	PM	VOC
4 Paint Spray Booths	636.9 lb/yr 0.32 TPY	12,912 lb/yr 6.46 TPY

As reflected in Table 2, the proposed project would be a minor modification to a minor facility and the potential pollutant emissions would not be subject to review under FAC Rule 17-2.500, Prevention of Significant Deterioration, and FAC Rule 17-2.510, New Source Review for Nonattainment Areas. Therefore, the projected potential pollutant emissions are subject to review in accordance with FAC Rule 17-2.520, Sources Not Subject to Prevention of Significant Deterioration or Nonattainment Requirements.

The following table will reflect the total potential pollutant emissions from the existing facility and the proposed modification:

Table 3

Source(s)	Potential Pollutant Emissions (lbs/yr)	
	PM	VOC
Grit Blaster	707.2	
4 Paint Spray Booths	938.6	25,509
Total:	1645.8	25,509
	0.82 TPY	12.75 TPY

The proposed modification, which includes the 3 existing paint spray booths and the proposed paint spray booth, shall be subject to FAC Rules 17-2.610(3), 17-2.620(1) and (2), and 17-2.650(1)(f)14.

In accordance with FAC Rule 17-2.610(3), Unconfined Emissions of PM, pollutant abatement equipment must be on at all times during operations. Therefore, the paint spray booths shall not be operated unless the exhaust fans and abatement equipment are functioning properly.

In accordance with FAC Rule 17-2.620(1), General Pollutant Emission Limiting Standards for VOC or organic solvents, no person shall store, pump, handle, process, load, unload or use in any process or installation VOC or organic solvents without applying known and existing vapor emission control devices or

systems deemed necessary and ordered by the Department. Therefore, during those times when the facility is being used for spray-painting or other related activities where VOC and solvent emissions can escape into the atmosphere, the doors of the paint spray booths shall be closed. Additional precautions, such as covering of solvent containers when not in use, shall be taken to prevent the escape of VOC fugitive emissions.

In accordance with FAC Rule 17-2.620(2), objectionable odors shall not be allowed off plant property.

The proposed modification is subject to FAC Rule 17-2.650(1)(f)14, Surface Coating of Miscellaneous Metal Parts and Products, which has an allowable emission limiting standard of 3.5 pounds of VOC per gallon of coating (0.42 kilograms per liter), excluding water. Because the total facility VOC emissions (see Table 3) are less than the threshold level of 13.14 TPY pursuant to FAC Rule 17-2.650(1)(c)1. at 3 lbs/hr and maximum potential operation, compliance with the emission limiting standard by averaging across lines on a 24-hour basis shall be allowed (Region IV EPA). However, if the facility exceeds this threshold level, compliance per line on a 24-hour basis shall be required. A line is defined as a paint spray booth operation.

III. Summary of Emissions and Air Quality Analysis

A. Emission Limitations

The regulated pollutant emissions from the proposed modification are volatile organic compounds (VOC). The following table reflects the allowable VOC emissions standard and limit applicable to the proposed modifications.

Table 4

Source(s)	VOC Allowable Emissions Standard and Limit
4 Paint Spray Booths	3.5 pounds per gallon of coating (0.42 kilograms per liter), less water, delivered to a coating applicator, averaged across all lines, and on a daily basis 25,509 lbs/year total

Note: EPA Method 24 shall be required to validate a manufacturer's specification per coating type (FAC Rule 17-2.700, Table 1).

Particulate matter emissions are insignificant.

B. Air Quality Analysis

From a technical review of the application and amendments, the department has determined that the proposed modification does not require an air quality analysis.

IV. Conclusion

The allowable emissions standard and limit from the proposed modification should not cause any violation to Florida's ambient air quality standard nor interfere with reasonable further progress toward attaining ambient air quality standards.

The General and Specific Conditions listed in the proposed permit (attached) will assure compliance with all applicable requirements of FAC Rule 17-2.

STATE OF FLORIDA

DEPARTMENT OF ENVIRONMENTAL REGULATION

TWIN TOWERS OFFICE BUILDING
2600 BLAIR STONE ROAD
TALLAHASSEE, FLORIDA 32301-8241

BOB GRAHAM
GOVERNOR

VICTORIA J. TSCHINKEL
SECRETARY

PERMITTEE:
FMC Corporation
Airline Equipment Division
7300 Presidents Drive
Orlando, Florida 32809

Permit Number: AC 48-098145
Expiration Date: December 31, 1986
County: Orange
Latitude/Longitude: 28° 27' 43"N/
81° 24' 39"W
Project: Four Paint Spray Booths:
Modify 3 Existing and
Construct a New One

This permit is issued under the provisions of Chapter 403, Florida Statutes, and Florida Administrative Code Rule(s) 17-2 and 17-4. The above named permittee is hereby authorized to perform the work or operate the facility shown on the application and approved drawings, plans, and other documents attached hereto or on file with the department and made a part hereof and specifically described as follows:

For the modification of 3 existing paint spray booths and construct a new paint spray booth (the 4th) at the applicants existing facility located in Orange County, Florida. The facility manufactures and processes airline ground support equipment. The paint spray booths are equipped with electrostastic spray guns and a water trap. The UTM coordinates are zone 17, 459.8 km East and 3148.2 km North.

The Source Classification Codes are 4-02-001-01 and 4-02-006-01.

Construction shall be in accordance with the permit application and plans, documents, amendments, and drawings except as otherwise noted on pages 5-7 of the "Specific Conditions."

Attachments are follows:

1. Application to modify/construct Air Pollution Sources, DER Form 17-1.202(1).

2. C. H. Fancy's letter dated February 6, 1985.

3. Larry E. McIntyre's letter with attachments dated May 16, 1985.

4. Interoffice Memorandum dated May 20, 1985, from Bruce Mitchell.

GENERAL CONDITIONS:

1. The terms, conditions, requirements, limitations, and restrictions set forth herein are "Permit Conditions" and as such are binding upon the permittee and enforceable pursuant to the authority of Sections 403.161, 403.727, or 403.859 through 403.861, Florida Statutes. The permittee is hereby placed on notice that the department will review this permit periodically and may initiate enforcement action for any violation of the "Permit Conditions" by the permittee, its agents, employees, servants or representatives.

2. This permit is valid only for the specific processes and operations applied for and indicated in the approved drawings or exhibits. Any unauthorized deviation from the approved drawings, exhibits, specifications, or conditions of this permit may constitute grounds for revocation and enforcement action by the department.

3. As provided in Subsections 403.087(6) and 403.722(5), Florida Statutes, the issuance of this permit does not convey any vested rights or any exclusive privileges. Nor does it authorize any injury to public or private property or any invasion of personal rights, nor any infringement of federal, state or local laws or regulations. This permit does not constitute a waiver of or approval of any other department permit that may be required for other aspects of the total project which are not addressed in the permit.

4. This permit conveys no title to land or water, does not constitute state recognition or acknowledgement of title, and does not constitute authority for the use of submerged lands unless herein provided and the necessary title or leasehold interests have been obtained from the state. Only the Trustees of the Internal Improvement Trust Fund may express state opinion as to title.

5. This permit does not relieve the permittee from liability for harm or injury to human health or welfare, animal, plant or aquatic life or property and penalties therefore caused by the construction or operation of this permitted source, nor does it allow the permittee to cause pollution in contravention of Florida Statutes and department rules, unless specifically authorized by an order from the department.

GENERAL CONDITIONS:

6. The permittee shall at all times properly operate and maintain the facility and systems of treatment and control (and related appurtenances) that are installed or used by the permittee to achieve compliance with the conditions of this permit, as required by department rules. This provision includes the operation of backup or auxiliary facilities or similar systems when necessary to achieve compliance with the conditions of the permit and when required by department rules.

7. The permittee, by accepting this permit, specifically agrees to allow authorized department personnel, upon presentation of credentials or other documents as may be required by law, access to the premises, at reasonable times, where the permitted activity is located or conducted for the purpose of:

a. Having access to and copying any records that must be kept under the conditions of the permit;

b. Inspecting the facility, equipment, practices, or operations regulated or required under this permit; and

c. Sampling or monitoring any substances or parameters at any location reasonably necessary to assure compliance with this permit or department rules.

Reasonable time may depend on the nature of the concern being investigated.

8. If, for any reason, the permittee does not comply with or will be unable to comply with any condition or limitation specified in this permit, the permittee shall immediately notify and provide the department with the following information:

a. a description of and cause of non-compliance; and

b. the period of noncompliance, including exact dates and times; or, if not corrected, the anticipated time the noncompliance is expected to continue, and steps being taken to reduce, eliminate, and prevent recurrence of the noncompliance.

GENERAL CONDITIONS:

The permittee shall be responsible for any and all damages which may result and may be subject to enforcement action by the department for penalties or revocation of this permit.

9. In accepting this permit, the permittee understands and agrees that all records, notes, monitoring data and other information relating to the construction or operation of this permitted source, which are submitted to the department, may be used by the department as evidence in any enforcement case arising under the Florida Statutes or department rules, except where such use is proscribed by Sections 403.73 and 403.111, Florida Statutes.

10. The permittee agrees to comply with changes in department rules and Florida Statutes after a reasonable time for compliance, provided however, the permittee does not waive any other rights granted by Florida Statutes or department rules.

11. This permit is transferable only upon department approval in accordance with Florida Administrative Code Rules 17-4.12 and 17-30.30, as applicable. The permittee shall be liable for any non-compliance of the permitted activity until the transfer is approved by the department.

12. This permit is required to be kept at the work site of the permitted activity during the entire period of construction or operation.

13. This permit also constitutes:

( ) Determination of Best Available Control Technology (BACT)
( ) Determination of Prevention of Significant Deterioration (PSD)
( ) Compliance with New Source Performance Standards.

14. The permittee shall comply with the following monitoring and record keeping requirements:

a. Upon request, the permittee shall furnish all records and plans required under department rules. The retention period for all records will be extended automatically, unless otherwise stipulated by the department, during the course of any unresolved enforcement action.

GENERAL CONDITIONS:

b. The permittee shall retain at the facility or other location designated by this permit records of all monitoring information (including all calibration and maintenance records and all original strip chart recordings for continuous monitoring instrumentation), copies of all reports required by this permit, and records of all data used to complete the application for this permit. The time period of retention shall be at least three years from the date of the sample, measurement, report or application unless otherwise specified by department rule.

c. Records of monitoring information shall include:

- the date, exact place, and time of sampling or measurements;
- the person responsible for performing the sampling or measurements;
- the date(s) analyses were performed;
- the person responsible for performing the analyses;
- the analytical techniques or methods used; and
- the results of such analyses.

15. When requested by the department, the permittee shall within a reasonable time furnish any information required by law which is needed to determine compliance with the permit. If the permittee becomes aware that relevant facts were not submitted or were incorrect in the permit application or in any report to the department, such facts or information shall be submitted or corrected promptly.

SPECIFIC CONDITIONS:

1. Annual hours of operation are 8760.

2. Maximum annual allowable VOC (volatile organic compounds) emissions shall not exceed 25,509 pounds.

3. The VOC allowable emission limiting standard, not to be exceeded, is 3.5 pounds per gallon of coating (0.42 kilograms per liter), less water, delivered to a coating applicator, averaged across all lines, and on a daily basis.

SPECIFIC CONDITIONS:

4. EPA Method 24 shall be required for each surface coating material (paint) to determine volatile matter content, water content, density, volume solids, and weight solids. The paint shall be tested as applied and should only be required again if the formula, as applied, changes.

5. The applicant shall maintain accurate record-keeping of all paints and solvents used in operation of the 4 spray booths. The applicant shall submit annual reports to the St. Johns River District Office as proof of compliance with permit VOC limits commencing one year after the operating permit is issued and annually thereafter.

6. During those times when the facility is being used for spray painting of other related activities where solvent emissions can escape to the atmosphere, the doors shall be closed. Additional precautions, such as covering of solvent containers when not in use, shall be taken to prevent escape of VOC fugitive emissions.

7. The paint spray booth(s) shall not be operated unless the exhaust fan and abatement equipment are functioning properly.

8. Compliance with the conditions of the permit shall be determined through visual inspection by a Department representative and submittal of paint/solvent records as stated in Condition No. 5. The applicant shall furnish the Department a 30 day notice prior to testing.

9. Objectionable odors shall not be allowed off plant property.

10. The applicant shall report any delays in construction and completion of this modification to the Department's St. Johns River District Office.

11. The applicant will demonstrate compliance with the conditions of the construction permit, and submit a complete application for an operating permit to the Department's St. John River District office prior to 90 days of the expiration date of the construction permit. The applicant may continue to operate in compliance with all terms of the construction permit until its expiration date or issuance of an operating permit.

PERMITTEE: FMC Corporation

Permit Number: AC 48-098145
Expiration Date: Dec. 31, 1986

SPECIFIC CONDITIONS:

12. Upon obtaining an operating permit, the applicant will be required to submit periodic test reports on the actual operation and emissions of the facility.

13. The source shall comply with the provisions and requirements of the general conditions.

Issued this ___ day of_____, 1985

STATE OF FLORIDA DEPARTMENT OF
ENVIRONMENTAL REGULATION

_____
VICTORIA J. TSCHINKEL, Secretary

____ pages attached.

State of Florida
DEPARTMENT OF ENVIRONMENTAL REGULATION

INTEROFFICE MEMORANDUM

For Routing To District Offices And/Or To Other Than The Addressee		
To: _____	Loctn.: _____	
To: _____	Loctn.: _____	
To: _____	Loctn.: _____	
From: _____	Date: _____	
Reply Optional [ ]	Reply Required [ ]	Info. Only [ ]
Date Due: _____	Date Due: _____	

TO: FMC Corporation File No. AC 48-098145

FROM: Bruce Mitchell BM

DATE: May 20, 1985

SUBJ: Particulate Matter Calculation

Based on the Annual Operating Report submitted to the St. Johns River District office:

[(2,549 gals x 6.16 lbs solids/gal)

+ (5,176 gals x 4.22 lbs solids/gal)]

x 0.25 x 0.10 = 938.6 lbs/yr total - 4 paint spray booths

938.6 - 301.7 = 636.9 lbs/yr net increase

The 301.7 lbs/yr is the previous projected potential emissions from the 3 existing paint spray booths.

BM/ks

Main File Copy

FMC Corporation

Airline Equipment Division
7300 Presidents Drive
Box 13400
Orlando Florida 32859
305 851 3377

FMC

May 16, 1985

CERTIFIED MAIL
RETURN RECEIPT REQUESTED

Mr. C. H. Fancy, P.E.
Deputy Chief
Bureau of Air Quality Management
State of Florida
Department of Environmental Regulations
Twin Towers Office Building
2600 Blair Stone Road
Tallahassee, FL 32301-8241

Re: Completeness Review for Application to Construct and Modify Air Pollution Source No. A048-70342

Dear Mr. Fancy:

The FMC Corporation Airline Equipment Division facility at 7300 Presidents Drive, Orlando, Florida submitted an application for modification of Air Permit No. A048-70342 on December 17, 1984; that application is for operation of paint spray booths at the facility. This letter supplies the additional information requested in the February 6, 1985 letter from the Florida Department of Environmental Regulations (DER). The information in this letter is not confidential.

We are enclosing an additional $300.00 fee. With the $100.00 fee submitted on December 17. This represents a total of $400.00 fee for a permit for four paint booths. For reasons discussed in this letter, we request that only one permit be issued for the four paint booths.

General Information
(DER questions 3, 10, 12 and 14)

The UTM coordinates of the facility are East 459.800/North 3148.200.

Stack geometry and flow data for the proposed fourth paint spray booth exhaust system are shown in Attachment III-H, Revision 1, appended to this letter.

The location of the proposed fourth paint spray booth is shown on the attached Process Flow Diagram, V-6 (Rev. 1).

The production changes proposed in this application increase the VOC and particulate emissions only from the three existing and the proposed fourth paint booths. No other existing air pollution source will have an increase of emissions as a result of the proposed change.

Proposed Production Schedule
(DER questions 5, 8 and 9)

We are providing a further explanation of the anticipated changes of product quantity and type at the Orlando facility. This information supplements the permit application. The facility will manufacture fewer loaders than described in Specific Condition No. 2 of the previous construction permit, AC48-48487, and will also manufacture other airline ground support equipment as described in Attachment III-B. The predicted quantities and types of equipment represent FMC's best forecast of the market requirements for the next several years; those forecasts are included in the application and are briefly described in attachment III-B. Although we have used the best available marketing information, FMC recognizes that market demands could change in the next several years as they have in the past three years. Therefore, we request that the permit be written to allow flexibility for the facility to change the product mix (i.e. increase production of some equipment types and decrease production of others) and/or add new products not described in the present application in order to continue to meet the changing market demands. We have described in the application, Attachment III-A, and in enclosed Attachment III-B the product mix which is the basis for our predicted paint usage.

We respectfully request that the conditions of the modified permit be based on VOC emissions, i.e. quantity of paint applied, and that no requirements be specified for the number or type of units manufactured. The permit application requested a daily VOC emissions limit of 260 pounds with a total annual maximum VOC emissions of 25,509 pounds (12.8 tons) from all of the paint booths combined. The request allows flexibility for FMC to efficiently schedule paint application for huge containerized cargo loaders, for groups of small equipment (e.g. baggage carts) or other products consistent with market needs.

Meaningful hourly emission rates cannot be determined for the facility due to the type of equipment painted, e.g. large loaders. We will at times have some or all paint booths idle (zero pounds VOC emissions) while at other times several painters will simultaneously apply paint to major subassemblies or to a large loader. We request that the permit not limit hourly emissions.

The permit application requests an increase in hours of operation to 24 hours per day and seven days per week. This is needed to meet the fluctuating requirements of the airline equipment market. This provision would enable FMC to intermittently operate the paint booths at any time during the week in order to efficiently use personnel and facilities. The request is for a permit which allows the flexibility for the facility to operate on any of the 365 days of the year and on any work shift; however, actual operation of each individual paint booth will be much less than 8,760 hours per year.

Distribution of Emissions
(DER questions 6, 11, 15, 16 and 17)

FMC requests that a single modified permit be written to specify one total VOC emission limit for all booths combined and that emissions not be limited on a booth-by-booth basis. The proposed permit would be similar to the existing permit which specifies one total VOC emission limit for the three paint booths combined.

Because we cannot predict the quantity of paint applied at a specific paint booth (nor the resultant emissions) due to the monthly variations of product mix, FMC requests that the modified permit specify one emission limit for all paint spray booths combined. FMC has calculated future VOC emissions based on the product mix defined in Attachment III-A of the application and Attachment III-B enclosed with this letter. We also request that the permit not limit the product mix of new or rebuilt equipment since facility compliance with the emission limits and the other conditions of the permit will control the facility impact on ambient air quality.

Compliance Issues
(DER questions 4, 7, 12 and 13)

The RACT (Reasonable Achievable Control Technology) requirement for the use of paints which emit 3.5 pounds VOC (or less) per gallon was achieved, on an average basis, during 1984. FMC continues to use RACT compliant paints. The demonstration of RACT compliance was provided in the August 31, 1984 letter to Mr. A. T. Sawicki of the Orlando DER office. Enclosed Attachments I and II, submitted with that letter, summarize the data which shows that the prime coat paint now used has a VOC emission of 2.9 pounds per gallon and that the various colors of the topcoat (medium-solids polyurethane) paint average 3.5 pounds VOC per gallon.

Enclosed Attachment II from The August 31, 1984 letter explains the difficulties encountered in obtaining a topcoat paint which meets the RACT requirement and also meets the quality requirements of FMC's customers. Further, as explained in the August letter, some types of RACT compliant topcoat paint are not available in the small quantities and many different colors required to meet the specific colors (hues) specified by the airline customers.

We now request, as was requested in the August 31, 1984 letter, that averaging of the topcoat paints be allowed for attaining RACT compliance. We further ask that averaging of VOC content of both the prime coat paint (2.9 pounds VOC) and the topcoat paint (3.5 pounds VOC average) be allowed. Experience at the Orlando facility indicates that the annual usage of paints would be 2,549 gallons of primer and 5,176 gallons of topcoat (see Section V of the application) which would provide a combined weighted average of 3.3 pounds of VOC per gallon of applied paint.

The facility will control the type and quantity of paints applied, using material balance methods, to ensure compliance with the RACT emission limits. Daily compliance will be controlled by specifying a paint allotment based on the usage (mixture) of primer and topcoat paints. Written records will monitor daily compliance. The record will show daily and cumulative (year to date) paint usage and, based on VOC analyses of paints (as applied), the daily and cumulative VOC emissions. That information will be monitored routinely by a representative of the Manufacturing Manager who is the permit signatory.

No other existing sources will have increased emissions as a result of the proposed production changes.

Fourth Paint Booth Installation

FMC plans to promptly change the product mix as described in the application. After DER issues the modified permit, we plan to increase production and to conform to the new permit emission limit. The initial increases in production will be implemented using only the three existing paint spray booths. The installation of the fourth paint spray booth is planned for 1986 although a change in market requirements could cause the paint booth to be installed prior to 1986 (or later than 1986). The fourth paint booth will be constructed with emission points as described in Attachment III-H.

Other Permits

The Orlando FMC facility has discontinued the use of a vapor degreaser and removed the unit. That degreaser has air emission permit No. A048-70341 which allows 5,757 pounds VOC emissions per year. The previously permitted VOC emissions from the degreaser could be utilized as an offset for 5,751 pounds of the VOC emissions increase requested in this application for a modified permit.

There are no other air emission permits for the FMC facility.

If you have any questions regarding the information in the application or in this letter, please contact Russell Simmons at the above address. If Mr. Simmons is not available, David Dube (215-299-6554) may also be contacted.

Very truly yours,

L E McIntyre

Larry E. McIntyre
Manufacturing Manager

cc: James T. Show, Orange County EPD
Joseph L. Tessitore, P.E., Cross/Tessitore & Assocs.
Dave J. Dube, FMC EPD
Tom Sawicki 5-21-85 RSN
Bruce Mitchell "

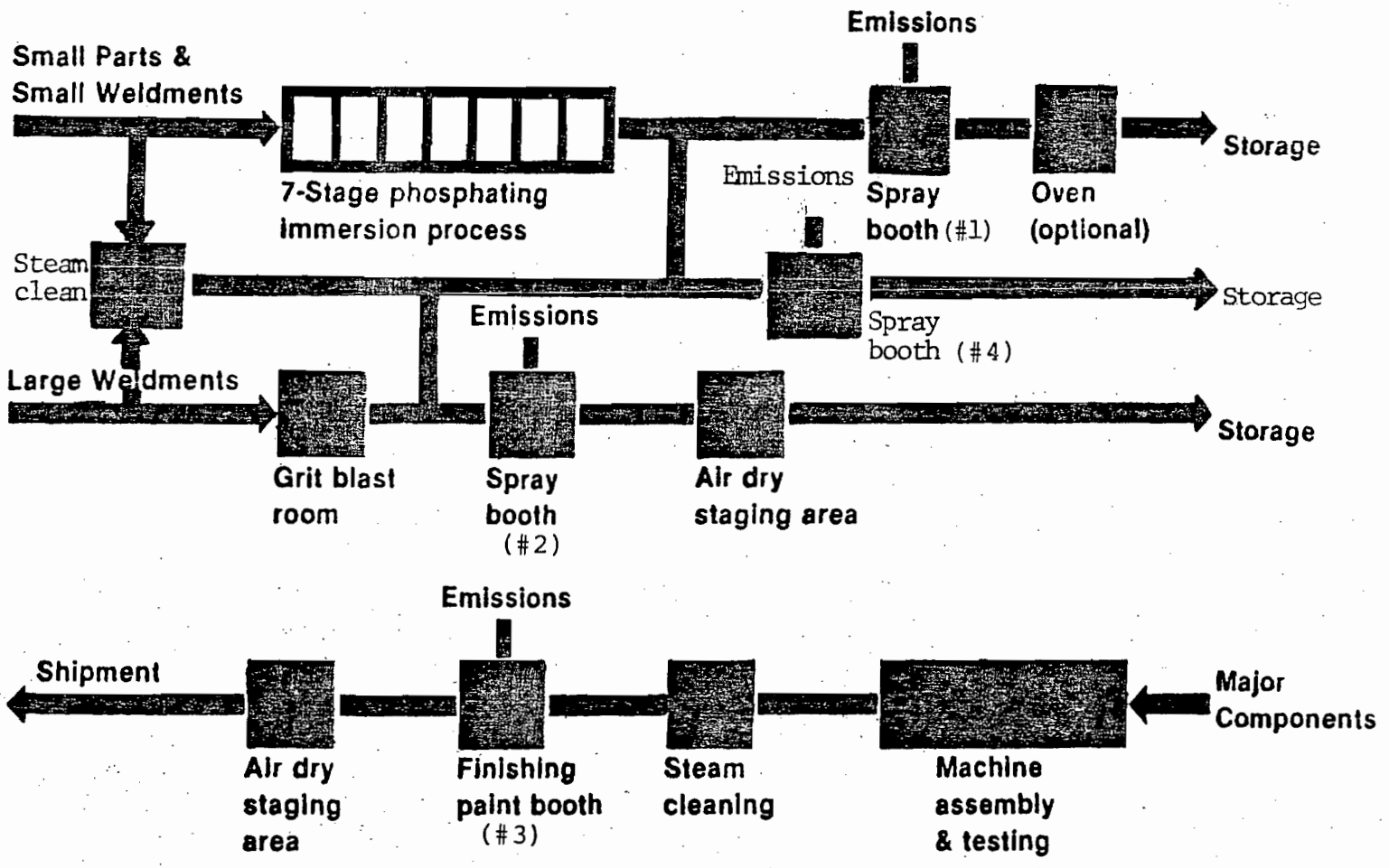
Attachment III-H

STACK GEOMETRY AND FLOW DATA

SPRAY BOOTH	STACK HEIGHT(ft)	STACK DIAMETER(in)	GAS FLOW (ACFM)	GAS VELOCITY(FPS)
1	40	4.00	30,000	40
2	40	2.83	100,000	67
3	40	4.00	120,000	40
4	40	4.00	30,000	40

Revision 1

Proposed Finishing Procedure



ATTACHMENT III-B

FMC CORPORATION
AIRLINE EQUIPMENT DIVISION
ORLANDO, FLORIDA

PAINT USAGE PER UNIT

EQUIPMENT	MAXIMUM ANNUAL QTY UNITS	GALLONS PAINT APPLIED PER UNIT PRIMER COAT (2.9 LB VOC/GAL)	TOPCOAT (3.5 LB VOC/GAL) *
LOWER LOBE LOADERS (Model JCPL2 & JCL2)	150	5.3	12.0
MAIN DECK LOADER (Model MDL40)	30	10.5	22.0
BELT LOADER	150	1.8	4.0
BAGGAGE CART (Model EBC)	1,300	0.4	0.6
CONTAINER TRAILERS (Model SET & STT)	1,200	0.5	1.0
UNIVERSAL BAG LOADER (Model UBL2)	22	2.3	4.6
CONTAINER/PALLET LOADER (Model CPT3)	6	2.3	5.8

* Based on a weighted average the VOC content for all colors of the topcoat paint is 3.5 pounds per gallon.

ATTACHMENT I

1984 COATINGS TEST RESULTS FOR VOLATILE ORGANIC COMPOUND CONTENT OF PRIMER AND TOPCOAT PAINTS

FMC Corporation, Airline Equipment Division, located at 7300 Presidents Drive, Orlando, Florida is required under specific Condition 18 of Operations Permit #A048-70342 to test all coatings for VOC content compliance with Florida DER Rule yearly from June 1, 1983 using (EPA) Method 24.

FMC obtained paint samples on December 14, 1983, January 16, 1984, June 5, 1984, August 20, 1984 and August 27, 1984. These samples were delivered to contract analytical laboratories in Florida for analysis. The results are shown in the attached table. All figures are representative of each paint in its catalyzed and reduced form "as applied at the applicator", excluding water.

The chart shows the water-reducible epoxy primer contains 2.90 pounds VOC per gallon. The manufacturer's material data sheets list this primer at 2.83 pounds VOC per gallon. The topcoat paints, all of which are high-solids polyurethanes, range from 3.02 to 3.78 pounds VOC per gallon. The weighted average of the topcoat paints, based on 1984 usage to date, is 3.47 pounds VOC per gallon. The arithmetic mean (non-averaged) is 3.56 pounds VOC per gallon. All samples are from the new water-reducible epoxy primer and high-solid polyurethane topcoat paints that were tested and accepted by FMC for application onto airline ground support equipment manufactured at this facility.

Acrylic enamel paints applied in 1983 and part of 1984 were not included in this sampling process. Instead, the sampling and analytical testing for VOC content was concentrated on the new paints used to replace the acrylics. The acrylics, if tested would average approximately 4.7 pounds VOC per gallon (Specific Condition 11 of Operations Permit #A048-70342 requires conventional acrylic paints to be replaced by high-solid paints by 1984).

1984 COATINGS TEST RESULTS FOR VOC CONTENT OF PRIMER AND TOPCOAT PAINTS*

PART NO.	COLOR	# VOC/GAL
PRIMER:		
100-0243	Lt. Blue	2.90
100-0243	Red Oxide	2.60
TOPCOATS:		
100-0228	White	3.40
100-0229	Gray	3.35
100-0232	Red	3.61
100-0233	Blue	3.69
100-0234	Yellow	3.34
100-0235	Brown	3.71
100-0237	White	3.55
100-0238	Red	3.65
100-0239	White	3.28
100-0240	White	3.51
100-0242	Blue	3.73
100-0244	Beige	3.43
100-0245	Yellow	3.71
100-0246	Blue	3.02
100-0247	Red	3.63
100-0248	Yellow	3.68
100-0249	Gold	3.68
100-0251	Blue	3.77
100-0254	Orange	3.78
100-0255	White	3.56
100-0257	Fawn	3.46
100-0258	Blue	3.67

TOPCOAT AVERAGE (NON-WEIGHTED): 3.56 # VOC/GAL

** TOPCOAT WEIGHTED AVERAGE : 3.47 # VOC/GAL

* LABORATORY ANALYSIS PERFORMED USING EPA METHOD 24

** WEIGHTED AVERAGE BASED ON YEAR-TO-DATE 1984 USAGE OF COLORS LISTED. WHITES, YELLOWS AND GRAYS ACCOUNT FOR APPROXIMATELY 72% OF TOTAL USAGE.

ATTACHMENT II

SEMI-ANNUAL REPORT
AUGUST 1984

STATUS OF THE DEVELOPMENT OF HIGH-SOLIDS PAINTS FOR USE AT THE FMC CORPORATION, AIRLINE EQUIPMENT DIVISION AT 7300 PRESIDENTS DRIVE, ORLANDO, FLORIDA SOURCE #A048-70342

FMC Corporation, Airline Equipment Division (AED), located at 7300 Presidents Drive, Orlando, Florida has been pursuing the development of high-solids paints for use on airline ground support equipment. The conditions of Operating Permit #A048-70342 requires FMC to develop paint coatings to comply with the RACT requirement, Rule 17-2.650(1)(f)14.b.(i)(B) which limits paint emissions to 3.5 pounds VOC per gallon, excluding water, delivered to the applicator as a replacement for conventional acrylic enamel paints applied at this facility. This report, which satisfies Specific Condition 11 of the Operating Permit, highlights FMC AED efforts in introducing the high-solids technology into the painting processes utilized at this facility.

FMC has tested paints from various paint manufacturers involved in the development of this technology. FMC found that since the technology was relatively new to the paint industry the availability of suitable paints that met FMC specifications for primers and topcoats was limited. In fact, FMC found some paint manufacturers reluctant to hasten development of high-solids because of the cost factor, particularly when informed of the low order quantities FMC would be requesting (FMC order quantities can range from 10 gallons to several hundred gallons, depending on customer color specs).

As stated in the semi-annual report dated May 12, 1983, FMC had found and arranged for the production scale evaluation of a high-solids alkyd paint. This paint, recommended after acceptable testing in a research laboratory environment, proved to be unacceptable in the manufacturing environment because of extended drying times and poor adhesion. The drying times exceeded 24 hours before the parts were able to be handled and some water entrapment was observed between the primer and topcoat causing the topcoat to bubble and peel. FMC products are sometimes shipped within 24 hours after painting. This makes the drying times a critical part of the paint processes.

To meet the shipping schedules, a faster drying paint would be required. The water entrapment was caused by inadequate drying of the water-reducible primer prior to topcoating with the high-solids alkyd paint. Additional attempts ended with similar results. It was determined that FMC could not accommodate the use of this paint on any of the products and was forced to continue using the conventional acrylic enamels.

By the 4th quarter of 1983, and as referenced in the semi-annual report dated November 10, 1983, FMC had become knowledgeable of the availability of a water-reducible epoxy primer and high-solids two-component polyurethane topcoat paints from two major paint manufacturers. These paints were reported to dry considerably faster and provide a higher quality finish and better performance than the high-solids alkyds. They consist of two reacting components (catalyst and paint components) that, when combined, initiate a chemical reaction to dry and harden the paint film. FMC contacted the manufacturers and arranged for a laboratory analysis for VOC content verification and for on-site line trials in December 1983 and January 1984.

The water-reducible epoxy primer is required to fully compliment the high-solids polyurethane topcoat in order to ensure best adhesion and performance. Based on the manufacturers data sheets, the VOC content was 2.83 pounds per gallon. The laboratory analysis, however, resulted in a measurement of 2.60 pounds VOC per gallon. Both figures exclude water (a recent analysis of the same primer of a different color presently used resulted in a measurement of 2.90 pounds VOC per gallon). FMC was pleased with the primer as it dried quickly, could be topcoated within thirty (30) minutes without water entrapment, and had considerably less overspray when compared to the primer previously used.

Four colors of a high-solid polyurethane topcoat were also tested for VOC content. The results averaged at 3.50 pounds VOC per gallon and had ranged from 3.34 to 3.69 pounds per gallon (recent laboratory analysis of 18 additional colors applied in 1984 average 3.47 pounds per gallon and range from 3.02 to 3.78).

Based on the above results, FMC contacted Florida Department of Environmental Regulations and arranged a meeting for January 25, 1984 to discuss the use of these paints. The outcome of the meeting was positive and FMC committed to using the water-reducible primer and polyurethanes.

Since January 1984, FMC has phased in the new epoxy primer and the polyurethane topcoat paints into the painting processes. In the process of phasing in the new paints, the remaining inventory of conventional primers and paints was used up.

FMC Corporation
Airline Equipment Division
Orlando, Florida 32809

THIS CHECK IS TENDERED IN FULL PAYMENT OF ITEMS LISTED BELOW

024435

VOUCHER NUMBER	VENDOR INVOICE DATE	NUMBER	AMOUNT	DISCOUNT	PAYMENT AMOUNT
	5/16/85	CKRQ 0149	300.00	.00	300.00
			TOTAL AMOUNT PAID ▶		300.00

THE FACE OF THIS DOCUMENT HAS A COLORED BACKGROUND ON WHITE PAPER

FMC Corporation
Airline Equipment Division
Orlando, Florida 32809

TEXAS COMMERCE BANK
LUBBOCK, TEXAS

88-436
1113

024435
CHECK NUMBER

PAY

DATE	AMOUNT
5/17/85	********300.00 ********300.00

TO THE ORDER OF

S03640

FLORIDA DEPT. OF ENVIRONMENTAL REGULATIONS
TWIN TOWERS BUILDING
2600 BLAIR STONE ROAD
TALLAHASSEE, FL 32301-8241

AUTHORIZED SIGNATURE

COUNTERSIGNED

THE BACK OF THIS DOCUMENT CONTAINS AN ARTIFICIAL WATERMARK - HOLD AT AN ANGLE TO VIEW

STATE OF FLORIDA
DEPARTMENT OF ENVIRONMENTAL REGULATION

No 76077

RECEIPT FOR APPLICATION FEES AND MISCELLANEOUS REVENUE

Received from FMC Corporation Date May 23, 1985

Address Box 13400 Orlando Florida 32859 Dollars $ 300.00

Applicant Name & Address Same as above

Source of Revenue

Revenue Code 001031 Application Number AC 48-098145

By Patricia E Adams

No. 0158650

RECEIPT FOR CERTIFIED MAIL

NO INSURANCE COVERAGE PROVIDED—
NOT FOR INTERNATIONAL MAIL
(See Reverse)

SENT TO
Mr. Larry E. McIntyre
STREET AND NO.

P.O., STATE AND ZIP CODE

POSTAGE		$
CONSULT POSTMASTER FOR FEES — CERTIFIED FEE		¢
OPTIONAL SERVICES — SPECIAL DELIVERY		¢
OPTIONAL SERVICES — RESTRICTED DELIVERY		¢
RETURN RECEIPT SERVICE	SHOW TO WHOM AND DATE DELIVERED	¢
RETURN RECEIPT SERVICE	SHOW TO WHOM, DATE, AND ADDRESS OF DELIVERY	¢
RETURN RECEIPT SERVICE	SHOW TO WHOM AND DATE DELIVERED WITH RESTRICTED DELIVERY	¢
RETURN RECEIPT SERVICE	SHOW TO WHOM, DATE AND ADDRESS OF DELIVERY WITH RESTRICTED DELIVERY	¢
TOTAL POSTAGE AND FEES		$

POSTMARK OR DATE

2/8/85

PS Form 3800, Apr. 1976

PS Form 3811, July 1983

● SENDER: Complete items 1, 2, 3 and 4.

Put your address in the "RETURN TO" space on the reverse side. Failure to do this will prevent this card from being returned to you. The return receipt fee will provide you the name of the person delivered to and the date of delivery. For additional fees the following services are available. Consult postmaster for fees and check box(es) for service(s) requested.

1. ☐ Show to whom, date and address of delivery.
2. ☐ Restricted Delivery.

3. Article Addressed to:
Mr. Larry McIntyre
FMC Corporation
7300 Presidents Dr.
Orlando, FL 32809

4. Type of Service:
☐ Registered ☐ Insured
☒ Certified ☐ COD
☐ Express Mail

Article Number
0158650

Always obtain signature of addressee or agent and DATE DELIVERED.

5. Signature – Addressee
X

6. Signature – Agent
X

7. Date of Delivery

8. Addressee's Address (ONLY if requested and fee paid)

PINE CASTLE BR. FEB 14 1985

DOMESTIC RETURN RE

STATE OF FLORIDA

DEPARTMENT OF ENVIRONMENTAL REGULATION

TWIN TOWERS OFFICE BUILDING
2600 BLAIR STONE ROAD
TALLAHASSEE, FLORIDA 32301-8241

BOB GRAHAM
GOVERNOR

VICTORIA J. TSCHINKEL
SECRETARY

February 6, 1985

CERTIFIED MAIL - RETURN RECEIPT REQUESTED

Mr. Larry E. McIntyre
Manufacturing Manager
FMC Corporation Airline Equipment Division
7300 Presidents Drive
Orlando, Florida 32809

Dear Mr. McIntyre:

RE: Completeness Review for Application to Construct and Modify Air Pollution Sources No. AC 48-098145

On January 10, 1985, the department received your application to construct a paint spray booth and to modify three existing paint spray booths. The bureau finds the application to be incomplete and the following information, including all assumptions, reference material and calculations, will have to be submitted to the department before the status of your application can, again, be ascertained:

° If there is any proprietary information required in a response to any of the following requests, please submit as a separate document and the department shall maintain its confidentiality.

° Remit to the Department of Environmental Regulation the sum of $300, which is the processing fee for the modification of three existing sources that will each be increasing their potential VOC emissions by less than 25 TPY.

° Provide the stack geometry and flow data for the proposed new paint spray booth exhaust system, Section III-H of DER Form 17-1.202.

° Has the applicant complied with Specific Condition No. 5 of the previous construction permit, No. AC 48-48487? Submit a paint composition comparison to support the compliance with the Specific Condition.

- With an additional work shift and the addition of a fourth paint spray booth, will the facility be processing more loaders than what is permitted in Specific Condition No. 2 of the previous Construction Permit, No. AC 48-48487? If so, submit a projection of the company's anticipation.

- What are the maximum potential pollutant emissions for processing a loader and each type of the airline ground support equipment?

- Submit the methodology to be used to comply with the VOC emission limiting standards on a 24-hour basis.

- Since the application contained a modification request to increase the daily hours of operation to three 8-hour shifts or 24-hours, why was the "Hourly Emissions (max.)" and the "Hourly Allowable Emissions" calculated using 16 hours as the daily operational time? See Section V, page 3 of the Attachments. Recalculate and submit a correction if the calculations are incorrect.

- Since 24-hour daily operations at 365 days per year is 8,760 hours per year operations, recalculate and submit the primer and topcoat utilizations and the process rates that were presented in Section V, page 1 of the Attachments, which used 8,736 hours as the annual hours of operation for calculations.

- Where will the new proposed paint spray booth be located in the "Process Flow Diagram" labeled V-6 of the Attachments?

- Will the shift to 8,760 hours per year to operate all of the paint spray booths (the three existing and the one proposed) affect the hours of operation of any of the other existing air pollution sources and/or increase any pollutant emissions? If so, identify the source(s) and submit their construction and operating permit numbers.

- If any of the existing air pollution sources, excluding the proposed modification and new

construction, have increased pollutant emissions not allowed by permitted conditions, calculate the potential pollutant emissions in TPY, present the data in the appropriate sections of an application, and submit it along with the appropriate fee per source to the DER's Bureau of Air Quality Management.

° Will all of the paints to be utilized in the new proposed paint spray booth be of the low solvent coating technology type? If not, will an incinerator be installed that will be required to oxidize 90 percent of the volatile organic compounds (VOC measured as total combustible carbon) which enter the incinerator to carbon dioxide and water?

° What are the UTM coordinates?

° What will be the daily and annual potential pollutant emissions from each of the existing paint spray booths?

° What will be the daily and annual potential pollutant emissions from the new paint spray booth?

° What will be the increase in the daily and annual potential pollutant emissions from each of the existing paint spray booths?

If there are any questions, please call Bruce Mitchell at (904)488-1344, or write to me at the above address.

Sincerely,

C.H. Fancy, P.E.
Deputy Chief
Bureau of Air Quality
Management

CHF/rw

cc: Joseph L. Tessitore
Suresh Chandnani

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FMC

FMC Corporation
Airline Equipment Division
Orlando, Florida 32809

TEXAS COMMERCE BANK
LUBBOCK, TEXAS

88-436
1113

19459
CHECK NUMBER

PAY

DATE	AMOUNT
12-19-84	***$100.00*******$100.00*****

TO THE ORDER OF

STATE OF FLORIDA DEPT. OF ENVIRONMENTAL REGULATIONS
3319 MAGUIRE BLVD. SUITE 232
ORLANDO, FL 32803-3767

AUTHORIZED SIGNATURE

COUNTERSIGNED

THE BACK OF THIS DOCUMENT CONTAINS AN ARTIFICIAL WATERMARK - HOLD AT AN ANGLE TO VIEW

STATE OF FLORIDA
DEPARTMENT OF ENVIRONMENTAL REGULATION

No 76077

RECEIPT FOR APPLICATION FEES AND MISCELLANEOUS REVENUE

Received from FMC Corporation Date May 23, 1985

Address Box 13400 Orlando Florida 32859 Dollars $ 300.00

Applicant Name & Address Same as above

Source of Revenue

Revenue Code 001031 Application Number AC 48-098145

By Patricia E Adams

DER

JAN 15 1985

BAQM

APPLICATION TRACKING SYSTEM 01/11/85

APPL NO:098145
APPL RECVD:01/10/85 TYPE CODE:AO SUBCODE:99 LAST UPDATE:01/11/85
DER OFFICE RECVD:ORL DER OFFICE TRANSFER TO:BAQ APPLICATION COMPLETE:__/__/__
DER PROCESSOR:CLAIRE FANCY
APPL STATUS:AC DATE:01/10/85 (ACTIVE/DENIED/WITHDRAWN/EXEMPT/ISSUED/GENERAL)
RELIEF:__ (SSAC/EXEMPTIONS/VARIANCE)
(Y/N) N MANUAL TRACKING DISTRICT:30 COUNTY:48
(Y/N) N DNR REVIEW REQD? LAT/LONG:28.27.43/81.24.39
(Y/N) N PUBLIC NOTICE REQD? BASIN-SEGMENT:__.___
(Y/N) N GOV BODY LOCAL APPROVAL REQD? COE #:_____
(Y/N) Y LETTER OF INTENT REQD? _ (I/ISSUE D/DENY) ALT#:___-_____

PROJECT SOURCE NAME:FMC CORPORATION/4 PAINT SPRAY BOOTH
STREET:7300 PRESIDENTS DRIVE CITY:ORLANDO
STATE:FL ZIP:_____ PHONE:___-___-____
APPLICATION NAME:MCINTYRE, LARRY E.
STREET:7300 PRESIDENTS DRIVE CITY:ORLANDO
STATE:FL ZIP:32809 PHONE:305-851-3377
AGENT NAME:CROSS/TESSITORE & ASSOCIATES, P.A.
STREET:4759 SOUTH CONWAY ROAD CITY:ORLANDO
STATE:FL ZIP:32812 PHONE:305-351-1484
FEE #1 DATE PAID:__/__/__ AMOUNT PAID:____ RECEIPT NUMBER:_____

B DATE APPLICANT INFORMED OF NEED FOR PUBLIC NOTICE - - - __/__/__
C DATE DER SENT DNR APPLICATION/SENT DNR INTENT - - - - - __/__/__--__/__/__
D DATE DER REQ. COMMENTS FROM GOV. BODY FOR LOCAL APP. -. __/__/__
E DATE #1 ADDITIONAL INFO REQ--REC FROM APPLICANT - - - - __/__/__--__/__/__
E DATE #2 ADDITIONAL INFO REQ--REC FROM APPLICANT - - - - __/__/__--__/__/__
E DATE #3 ADDITIONAL INFO REQ--REC FROM APPLICANT - - - - __/__/__--__/__/__
E DATE #4 ADDITIONAL INFO REQ--REC FROM APPLICANT - - - - __/__/__--__/__/__
E DATE #5 ADDITIONAL INFO REQ--REC FROM APPLICANT - - - - __/__/__--__/__/__
E DATE #6 ADDITIONAL INFO REQ--REC FROM APPLICANT - - - - __/__/__--__/__/__
F DATE GOVERNING BODY REQUESTED SURVEY RESULTS/REPORTS - - __/__/__
G DATE FIELD REPORT WAS REQ--REC - - - - - - - - - - - - __/__/__--__/__/__
H DATE DNR REVIEW WAS COMPLETED - - - - - - - - - - - - __/__/__

I DATE APPLICATION WAS COMPLETE - - - - - - - - - - - - __/__/__
J DATE GOVERNING BODY PROVIDED COMMENTS OR OBJECTIONS - - __/__/__
K DATE NOTICE OF INTENT WAS SENT--REC TO APPLICANT - - - - __/__/__--__/__/__
L DATE PUBLIC NOTICE WAS SENT TO APPLICANT - - - - - - - __/__/__
M DATE PROOF OF PUBLICATION OF PUBLIC NOTICE RECEIVED - - __/__/__
N WAIVER DATE BEGIN--END (DAY 90) - - - - - - - - - - - __/__/__--__/__/__

COMMENTS:

AC 48-098145

STATE OF FLORIDA

DEPARTMENT OF ENVIRONMENTAL REGULATION

BOB GRAHAM
GOVERNOR

VICTORIA J. TSCHINKEL
SECRETARY

APPLICATION TO OPERATE/CONSTRUCT AIR POLLUTION SOURCES

SOURCE TYPE: Manufacturing [ ] New[1] [X] Existing[1]

APPLICATION TYPE: [ ] Construction [ ] Operation [X] Modification

COMPANY NAME: FMC Corporation Airline Equipment Division COUNTY: Orange

Identify the specific emission point source(s) addressed in this application (i.e. Lime Kiln No. 4 with Venturi Scrubber; Peaking Unit No. 2, Gas Fired) Four Paint Spray Booths

SOURCE LOCATION: Street 7300 Presidents Drive City Orlando

UTM: East _____ North _____

Latitude 28 ° 27 ' 43 "N Longitude 81 ° 24 ' 39 "W

APPLICANT NAME AND TITLE: Mr. Larry E. McIntyre, Manufacturing Manager

APPLICANT ADDRESS: 7300 Presidents Drive, Orlando, Florida 32809

SECTION I: STATEMENTS BY APPLICANT AND ENGINEER

A. APPLICANT

I am the undersigned owner or authorized representative* of FMC Corporation

I certify that the statements made in this application for a modification permit are true, correct and complete to the best of my knowledge and belief. Further, I agree to maintain and operate the pollution control source and pollution control facilities in such a manner as to comply with the provision of Chapter 403, Florida Statutes, and all the rules and regulations of the department and revisions thereof. I also understand that a permit, if granted by the department, will be non-transferable and I will promptly notify the department upon sale or legal transfer of the permitted establishment.

*Attach letter of authorization

Signed: Larry E McIntyre

Manufacturing Manager
Name and Title (Please Type)

Date: 12/18/84 Telephone No. 305-851-3377

B. PROFESSIONAL ENGINEER REGISTERED IN FLORIDA (where required by Chapter 471, F.S.)

This is to certify that the engineering features of this pollution control project have been designed/examined by me and found to be in conformity with modern engineering principles applicable to the treatment and disposal of pollutants characterized in the permit application. There is reasonable assurance, in my professional judgment, that

[1] See Florida Administrative Code Rule 17-2.100(57) and (104)

the pollution control facilities, when properly maintained and operated, will discharge an effluent that complies with all applicable statutes of the State of Florida and the rules and regulations of the department. It is also agreed that the undersigned will furnish, if authorized by the owner, the applicant a set of instructions for the proper maintenance and operation of the pollution control facilities and, if applicable, pollution sources.

Signed Joseph L. Tessitore

Joseph L. Tessitore

Name (Please Type)

Cross/Tessitore & Associates, P.A.

Company Name (Please Type)

4759 South Conway Road, Orlando FL 32812

Mailing Address (Please Type)

Florida Registration No. 23374 Date: 15 Nov 84 Telephone No. (305) 851-1484

SECTION II: GENERAL PROJECT INFORMATION

A. Describe the nature and extent of the project. Refer to pollution control equipment, and expected improvements in source performance as a result of installation. State whether the project will result in full compliance. Attach additional sheet if necessary.

See Attachment II-A

B. Schedule of project covered in this application (Construction Permit Application Only)

Start of Construction _____ Completion of Construction _____

C. Costs of pollution control system(s): (Note: Show breakdown of estimated costs only for individual components/units of the project serving pollution control purposes. Information on actual costs shall be furnished with the application for operation permit.)

D. Indicate any previous DER permits, orders and notices associated with the emission point, including permit issuance and expiration dates.

Permit Number AO48-70342

Issued 28 Oct 83

Expiration Date: 25 Oct 88

E. Requested permitted equipment operating time: hrs/day 24 ; days/wk 7 ; wks/yr 52 ;

if power plant, hrs/yr ____ ; if seasonal, describe: ____

F. If this is a new source or major modification, answer the following questions. (Yes or No)

1. Is this source in a non-attainment area for a particular pollutant?	YES
a. If yes, has "offset" been applied?	NO
b. If yes, has "Lowest Achievable Emission Rate" been applied?	NO
c. If yes, list non-attainment pollutants.	OXIDANTS
2. Does best available control technology (BACT) apply to this source? If yes, see Section VI.	NO
3. Does the State "Prevention of Significant Deterioriation" (PSD) requirement apply to this source? If yes, see Sections VI and VII.	NO
4. Do "Standards of Performance for New Stationary Sources" (NSPS) apply to this source?	NO
5. Do "National Emission Standards for Hazardous Air Pollutants" (NESHAP) apply to this source?	NO
H. Do "Reasonably Available Control Technology" (RACT) requirements apply to this source?	YES
a. If yes, for what pollutants?	VOC
b. If yes, in addition to the information required in this form, any information requested in Rule 17-2.650 must be submitted.	

Attach all supportive information related to any answer of "Yes". Attach any justification for any answer of "No" that might be considered questionable.

SECTION III: AIR POLLUTION SOURCES & CONTROL DEVICES (Other than Incinerators)

A. Raw Materials and Chemicals Used in your Process, if applicable:

Description	Contaminants		Utilization Rate - lbs/hr	Relate to Flow Diagram
	Type	% Wt		
Primer	VOC	23.6	3.59	See Attachment III-A
Topcoat	VOC	35.7	5.81	and V-6

B. Process Rate, if applicable: (See Section V, Item 1)

1. Total Process Input Rate (lbs/hr): 9.40

2. Product Weight (lbs/hr): 6.48

C. Airborne Contaminants Emitted: (Information in this table must be submitted for each emission point, use additional sheets as necessary)

Name of Contaminant	Emission[1]		Allowed[2] Emission Rate per Rule 17-2	Allowable[3] Emission lbs/hr	Potential[4] Emission		Relate to Flow Diagram
	Maximum lbs/hr	Actual T/yr			lbs/yr	T/yr	
VOC *	16.3	12.8	3.5 lb VOC	16.9	25,500	12.8	
			per gallon				

[1] See Section V, Item 2.

[2] Reference applicable emission standards and units (e.g. Rule 17-2.600(5)(b)2. Table II, E. (1) - 0.1 pounds per million BTU heat input)

[3] Calculated from operating rate and applicable standard.

[4] Emission, if source operated without control (See Section V, Item 3).

*These VOC emissions are based on the primer and topcoat utilization and VOC content as shown in Attachment III-A. Any change in production mix and/or primer/topcoat utilized may change VOC emissions, however VOC emissions will not exceed RACT and annual VOC emissions will not be exceeded.

D. Control Devices: (See Section V, Item 4)

Name and Type (Model & Serial No.)	Contaminant	Efficiency	Range of Particles Size Collected (in microns) (If applicable)	Basis for Efficiency (Section V Item 5)

E. Fuels

Type (Be Specific)	Consumption*		Maximum Heat Input (MMBTU/hr)
	avg/hr	max./hr	

*Units: Natural Gas--MMCF/hr; Fuel Oils--gallons/hr; Coal, wood, refuse, other--lbs/hr.

Fuel Analysis:

Percent Sulfur: _____ Percent Ash: _____

Density: _____ lbs/gal Typical Percent Nitrogen: _____

Heat Capacity: _____ BTU/lb _____ BTU/gal

Other Fuel Contaminants (which may cause air pollution): _____

F. If applicable, indicate the percent of fuel used for space heating.

Annual Average _____ Maximum _____

G. Indicate liquid or solid wastes generated and method of disposal.

Paint booth water will be treated on site and discharged to the sanitary sewer after treatment. Paint booth sludge will be disposed off site in accordance with FDER and EPA requirements.

H. Emission Stack Geometry and Flow Characteristics (Provide data for each stack):

Stack Height: * ft. Stack Diameter: * ft.

Gas Flow Rate: ACFM * DSCFM Gas Exit Temperature: ambient °F.

Water Vapor Content: ambient % Velocity: * FPS

*See Attachment III-H

SECTION IV: INCINERATOR INFORMATION

Type of Waste	Type 0 (Plastics)	Type I (Rubbish)	Type II (Refuse)	Type III (Garbage)	Type IV (Pathological)	Type V (Liq.& Gas By-prod.)	Type VI (Solid By-prod.)
Actual lb/hr Incinerated							
Uncontrolled (lbs/hr)							

Description of Waste _____

Total Weight Incinerated (lbs/hr) _____ Design Capacity (lbs/hr) _____

Approximate Number of Hours of Operation per day _____ day/wk _____ wks/yr. _____

Manufacturer _____

Date Constructed _____ Model No. _____

	Volume $(ft)^3$	Heat Release (BTU/hr)	Fuel		Temperature (°F)
			Type	BTU/hr	
Primery Chamber					
Secondary Chamber					

Stack Height: _____ ft. Stack Diamter: _____ Stack Temp. _____

Flow Rate: _____ ACFM _____ DSCFM* Velocity: _____ FPS

*If 50 or more tons per day design capacity, submit the emissions rate in grains per standard cubic foot dry gas corrected to 50% excess air.

Type of pollution control device: [ ] Cyclone [ ] Wet Scrubber [ ] Afterburner

[ ] Other (specify) _____

Brief description of operating characteristics of control devices: _____

_____

_____

_____

_____

Ultimate disposal of any effluent other than that emitted from the stack (scrubber water, ash, etc.):

_____

_____

_____

_____

NOTE: Items 2, 3, 4, 6, 7, 8, and 10 in Section V must be included where applicable.

SECTION V: SUPPLEMENTAL REQUIREMENTS

Please provide the following supplements where required for this application.

1. Total process input rate and product weight -- show derivation [Rule 17-2.100(127)]

2. To a construction application, attach basis of emission estimate (e.g., design calculations, design drawings, pertinent manufacturer's test data, etc.) and attach proposed methods (e.g., FR Part 60 Methods 1, 2, 3, 4, 5) to show proof of compliance with applicable standards. To an operation application, attach test results or methods used to show proof of compliance. Information provided when applying for an operation permit from a construction permit shall be indicative of the time at which the test was made.

3. Attach basis of potential discharge (e.g., emission factor, that is, AP42 test).

4. With construction permit application, include design details for all air pollution control systems (e.g., for baghouse include cloth to air ratio; for scrubber include cross-section sketch, design pressure drop, etc.)

5. With construction permit application, attach derivation of control device(s) efficiency. Include test or design data. Items 2, 3 and 5 should be consistent: actual emissions = potential (1-efficiency).

6. An 8 1/2" x 11" flow diagram which will, without revealing trade secrets, identify the individual operations and/or processes. Indicate where raw materials enter, where solid and liquid waste exit, where gaseous emissions and/or airborne particles are evolved and where finished products are obtained.

7. An 8 1/2" x 11" plot plan showing the location of the establishment, and points of airborne emissions, in relation to the surrounding area, residences and other permanent structures and roadways (Example: Copy of relevant portion of USGS topographic map).

8. An 8 1/2" x 11" plot plan of facility showing the location of manufacturing processes and outlets for airborne emissions. Relate all flows to the flow diagram.

9. The appropriate application fee in accordance with Rule 17-4.05. The check should be made payable to the Department of Environmental Regulation.

10. With an application for operation permit, attach a Certificate of Completion of Construction indicating that the source was constructed as shown in the construction permit.

SECTION VI: BEST AVAILABLE CONTROL TECHNOLOGY

A. Are standards of performance for new stationary sources pursuant to 40 C.F.R. Part 60 applicable to the source?

[ ] Yes [ ] No

Contaminant	Rate or Concentration

B. Has EPA declared the best available control technology for this class of sources (If yes, attach copy)

[ ] Yes [ ] No

Contaminant	Rate or Concentration

C. What emission levels do you propose as best available control technology?

Contaminant	Rate or Concentration

D. Describe the existing control and treatment technology (if any).

1. Control Device/System:
2. Operating Principles:
3. Efficiency:*
4. Capital Costs:

*Explain method of determining

FMC Corporation, Airline Equipment Division (AED), is located within Orange County at 7300 Presidents Drive, Orlando, Florida. FMC manufactures at this location airline ground support equipment which is sold to commercial airlines world-wide for use in loading and unloading containerized cargo to and from airplanes. This equipment is built using mild steel structures and components which are welded, assembled, and prime painted with a water-based epoxy primer. After final assembly and testing, each finished loader is topcoated with a high-gloss medium-solids polyurethane topcoat paint (Attachment V-6 contains a flow diagram of the painting processes employed).

With the utilization of the new paints, FMC has achieved the requirements of the RACT Rule. On a weighted basis, the topcoat paints alone historically averaged less than 3.5 pounds VOC per gallon of coating, as measured at the applicator. When combined with the water-based primer, the total system VOC per gallon average is even less. Projected annual primer and topcoat usage shows the weighted average will continue to comply with this standard.

Since 1981, the market conditions and requirements have changed due to uncontrollable economic and business variables. FMC will build fewer loaders than originally projected, but will introduce airline ground support equipment product lines such as belt loaders and baggage/container trailers, through 1988. Total production, when compared to original estimations, will increase through 1988, the year of expiration of the present permit. Additionally, the original paint usage requirements per loader provided as a basis in the original permit application have been proven to be low. Experience to date has shown higher usages per loader than projected (20% increase in paint solids applied). Resultant increases in production and paint usage increase the VOC emissions beyond the amounts allowed in the present permit. Therefore, FMC needs an increase in the allowable VOC emissions, both annual and daily, to meet the changing business requirement.

Present allowable annual VOC emissions need to be increased to 25,500 pounds per year. This is based on the maximum projected production levels through 1988 using the new low-solvent paint system and application equipment. The maximum allowable daily VOC emission limit, if required, would be 260 pounds on any single day, based on the maximum projected number of loaders and/or other products that can be painted on a worst-case day. Realistically, the daily maximum would not be attained every day of operation, but could conceivably be attained on certain days, depending on scheduling of units through the paint department. The operating hours need to be increased to allow for three eight-hour working shifts, seven days per week, fifty-two weeks per year.

Furthermore, FMC needs to install an additional paint spray booth at this location to accommodate the increasing production requirements. Both primer and topcoat paints will be applied in this booth. Initial utilization of this booth will be in 1985.

All calculations in this application for permit modification have been developed based on maximum anticipated production levels through 1988. All VOC figures are based on VOC content of the paint as applied at the gun (catalyzed and reduced).

Attachment III-H

STACK GEOMETRY AND FLOW DATA

SPRAY BOOTH	STACK HEIGHT (ft)	STACK DIAMETER (in)	GAS FLOW (ACFM)	GAS VELOCITY (FPS)
1	40	4.00	30,000	40
2	40	2.83	100,000	67
3	40	4.00	120,000	40
4	←←←←←←←←←←To be supplied→→→→→→→→→→→→→→→→→→→→			

ATTACHMENT V-2

VOC CONTENT

WEIGHTED AVERAGE OF MEDIUM-SOLIDS POLYURETHANE TOPCOAT PAINTS

(as of 8/29/84)

PART NO	COLOR	QTY (GAL)	×	VOC CONTENT* (LBS/GAL)	=	TOTAL VOC (LBS)
100-0226	WHITE	81		3.04		246.2
100-0228	WHITE	136		3.40		462.4
100-0229	GRAY	112		3.35		375.2
100-0232	RED	4		3.61		14.4
100-0233	BLUE	11		3.69		40.6
100-0234	YELLOW	75		3.34		250.5
100-0235	BROWN	15		3.71		55.7
100-0237	WHITE	17		3.55		60.4
100-0238	RED	20		3.65		73.0
100-0239	WHITE	24		3.28		78.7
100-0240	WHITE	25		3.51		87.8
100-0242	BLUE	32		3.73		119.4
100-0244	BEIGE	18		3.43		61.7
100-0245	YELLOW	10		3.71		37.1
100-0246	BLUE	6		3.02		18.1
100-0247	RED	39		3.63		141.6
100-0248	YELLOW	8		3.68		29.4
100-0249	GOLD	14		3.68		51.5
100-0251	BLUE	1		3.77		3.8
100-0254	ORANGE	10		3.78		37.8
100-0255	WHITE	16		3.56		57.0
100-0257	FAWN	16		3.46		55.4
100-0258	BLUE	20		3.67		73.4
		710 gal				2,431.2 lbs

$$\text{WEIGHTED AVERAGE} = \frac{2{,}431 \text{ LBS VOC}}{710 \text{ GALLONS}} = 3.42 \text{ LBS VOC/GAL}$$

* Catalyzed and reduced as applied at the spray gun.

FMC/PAINT SPRAY BOOTH/MODIFICATION

SECTION V

1) Total Process Input Rate and Product Weight

Primer Utilization* = (2,549) $\frac{gal}{yr}$ x (12.3) $\frac{lbs}{gal}$

= (31,357) $\frac{lbs}{yr}$ x $\frac{yr}{(8736)}$ $\frac{1}{hr}$

= 3.59 lbs/hr

Topcoat Utilization* = (5176) $\frac{gal}{yr}$ x (9.8) $\frac{lbs}{gal}$

= (50,724) $\frac{lbs}{yr}$ x $\frac{yr}{(8736)}$ $\frac{1}{hrs}$

= 5.81 lbs/hr

% VOC

Primer VOC Content = 2.9 $\frac{lbs}{gal}$

Topcoat VOC Content = 3.5 $\frac{lbs}{gal}$

% Primer VOC = $(\frac{2.9}{12.3})$ x 100 = 23.6

% Topcoat VOC = $(\frac{3.5}{9.8})$ x 100 = 35.7

Process Rate

Total Process Input Rate = 3.59 + 5.81 = 9.4 lbs/hr

Product Weight Rate = 9.4 - [(3.59)(0.236) + (5.81)(0.357)]

= 9.4 - 0.85 - 2.07 = 6.48 lbs/hr

*The primer and topcoat utilization are based on current product mix and paint experience. Product mix and paint types (primer and topcoat) may change in the future, however, VOC annual emissions will not be exceeded.

2) Emissions Estimates

A) Actual Emissions

1) Annual Emissions (Maximum)

Annual emissions are estimated on maximum production for 1988 at the Orlando facility. These emissions are based on the product mix and surface coating as shown in Item 2-1. However, product mix changes may occur during the period of the permit.

Material	Quantity (gals/yr)	VOC (lbs) gal	Emissions (lbs/yr)
Primer	2,549	2.9	7,393
Topcoat	5,176	3.5*	18,116
		Total (lbs/yr)	25,509
		(T/yr)	12.8

*See Attachment V-2, showing Topcoat VOC content for each color and weighted Topcoat color useage.

2) Daily Emissions (Maximum)

Material	Quantity (gals/day)	VOC (lbs/gal)	Emissions (lbs/day)
Primer	17	2.9	50
Topcoat	60	3.5*	210
		Total (lbs/day)	260

3) Hourly Emissions (Maximum)

Maximum hourly emissions will occur when daily maximum emissions are distributed over a 16 hour workday.

Maximum Hourly VOC = $\frac{260.15}{16}$ = 16.26 lbs/hr

B) Allowable Emissions (RACT and Paint Required)

1) Annual Allowable

Material	Quantity(gals/yr)	Allowable VOC(lbs/gal)	Emissions(lbs/yr)
Primer	2,549	3.5	8922
Topcoat	5,176	3.5	18116
		Total (lbs/yr) =	27038
		(T/yr) =	13.5

2) Daily Allowable (Maximum)

Material	Quantity(gals/day)	Allowable VOC(lbs/gal)	Emissions(lbs/yr)
Primer	17	3.5	60
Topcoat	60	3.5	210
		Total (lbs/day) =	270

3) Hourly Allowable (Maximum)

Same as Item A-3

Maximum Hourly Allowable = $\frac{270}{16}$ = 16.9 lbs/hr

3) Potential Emissions

Potential emissions are same as actual emissions

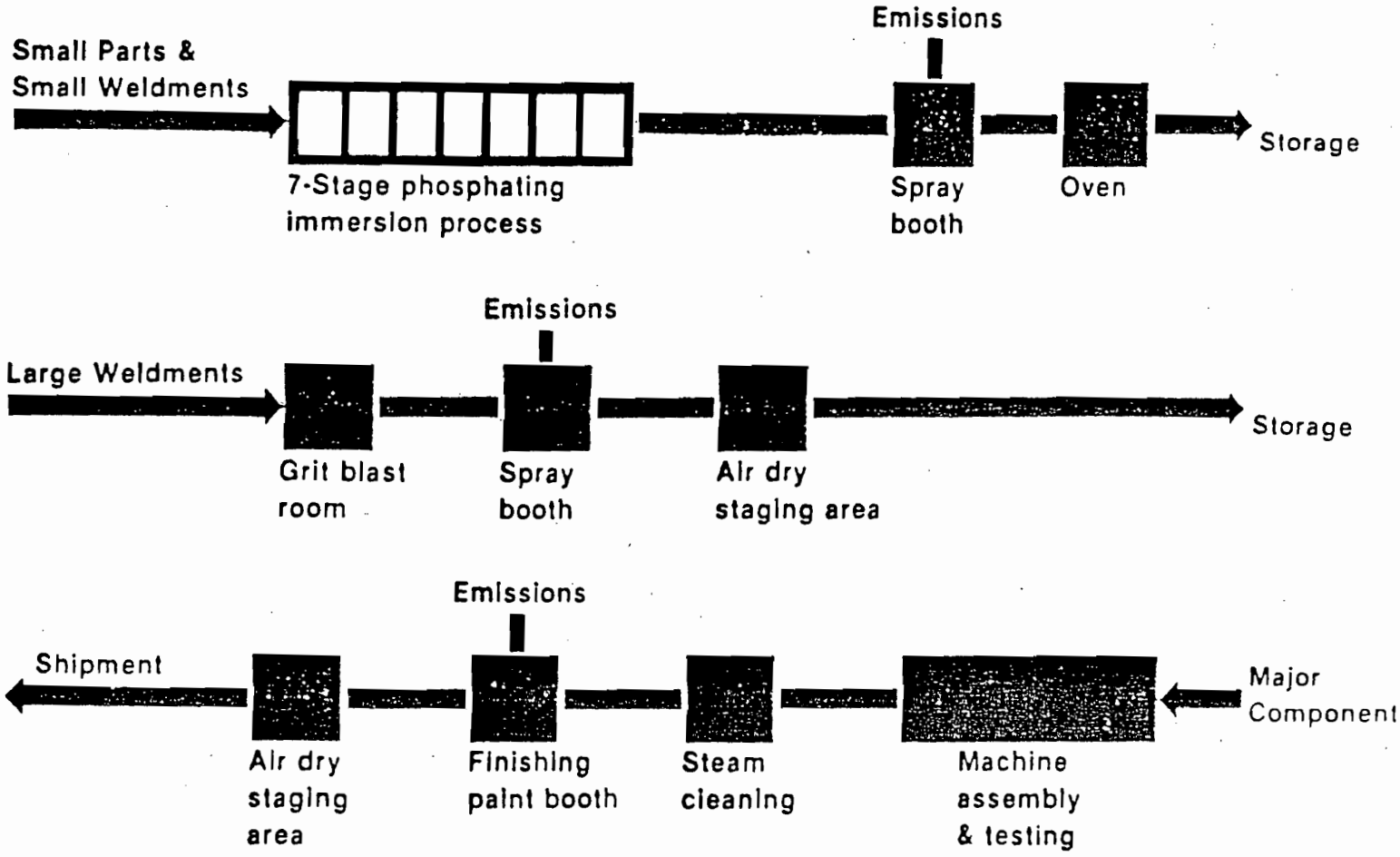
4) Control System Design Details

Not Applicable

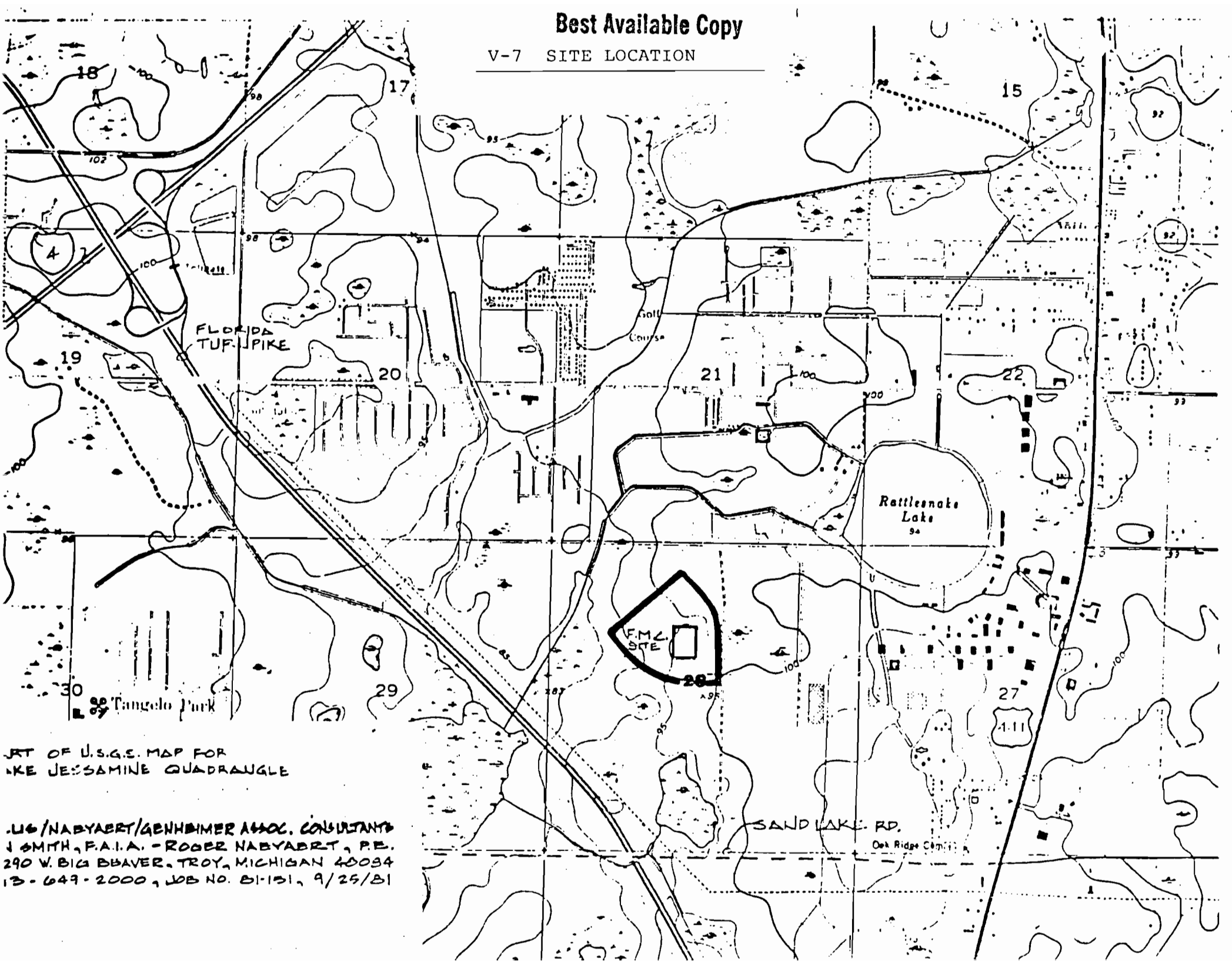
5) Control System Efficiency

Not Applicable

Finishing Procedure



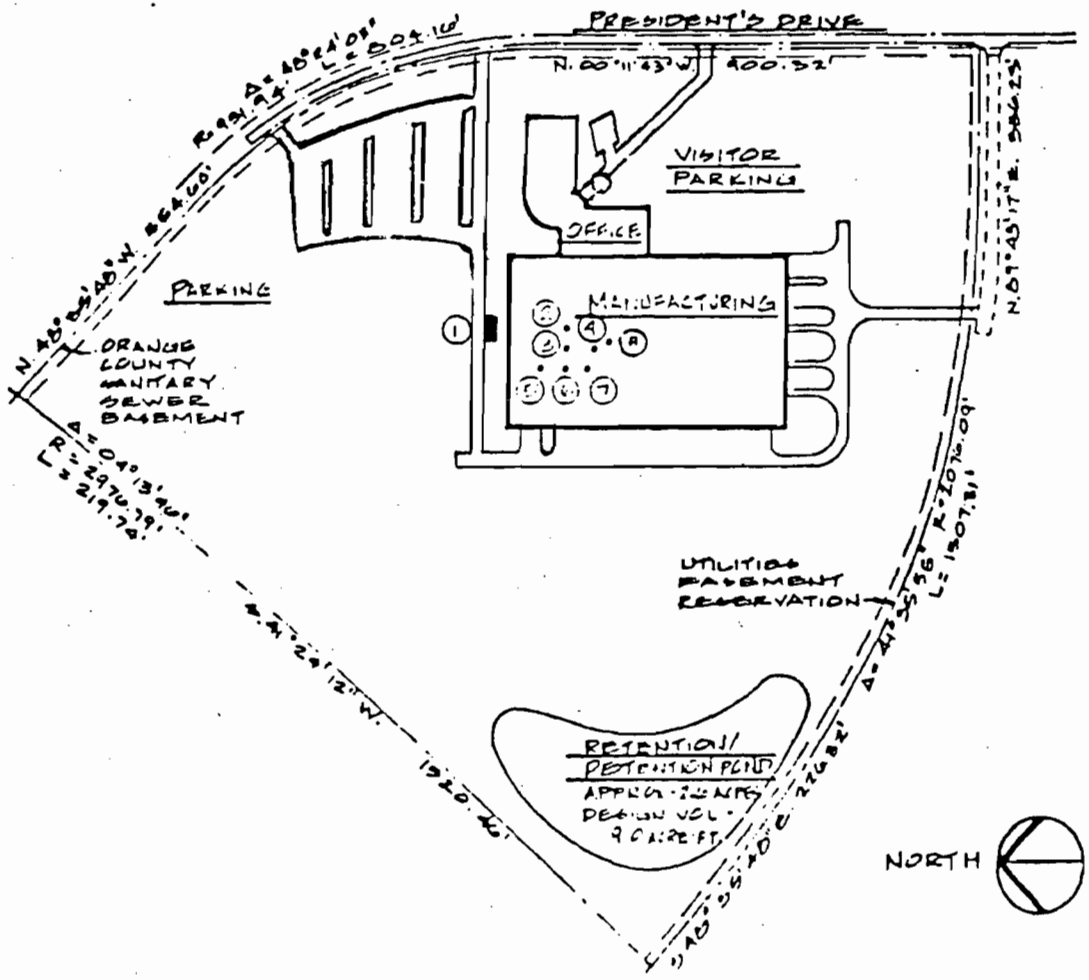
V-7 SITE LOCATION



RT OF U.S.G.S. MAP FOR
KE JESSAMINE QUADRANGLE

UG/NABYARET/GENHEIMER ASSOC. CONSULTANTS
J SMITH, F.A.I.A. - ROGER NABYARET, P.E.
290 W. BIG BEAVER, TROY, MICHIGAN 48084
13-649-2000, JOB NO. 81-151, 9/25/81

V-8 PLOT PLAN



FMC CORPORATION

AIRLINE EQUIPMENT DIVISION
EASTERN FACILITY ORLANDO, FLORIDA

LEGEND

1. UNDERGROUND TANKS
   - 1 - 2000 GAL. GASOLINE
   - 1 - 2000 GAL. DIESEL FUEL
   - 2 - 2000 GAL. HYDRAULIC OIL
   - 1 - 2000 GAL. WASTE OIL
2. PRIME PAINT SPRAY BOOTH EXHAUST
3. PHOSPHATE LINE EXHAUSTS
4. PRIME PAINT DRYING OVEN EXHAUST
5. FINAL PAINT SPRAY BOOTH EXHAUSTS
6. PRIME PAINT SPRAY BOOTH EXHAUSTS
7. GRIT BLAST BOOTH EXHAUST
8. PRIME/FINISH PAINT SPRAY BOOTH EXHAUST

SITE PLAN

NO SCALE

ELLIS/NAEYAERT/GENHEIMER ASSOC. CONSULTANTS
LIN SMITH, F.A.I.A. - ROGER NAEYAERT, P.E.
3290 W. BIG BEAVER, TROY, MICHIGAN 48084
313 - 649 - 2000, JOB NO 81-131, 9/25/81

ATTACHMENT III-A

FMC CORPORATION
AIRLINE EQUIPMENT DIVISION
RACT EQUIVALENCE

SUMMARY VOC EMISSIONS AND PRIMER/TOPCOAT UTILIZATION

	ANNUAL (LBS)	DAILY * (LBS)
PRIMER	7,393	50
TOPCOAT	18,116	210
TOTAL	25,509	260

MAXIMUM NUMBER OF UNITS PAINTED

PRODUCT	ANNUAL	DAILY
LL. LOADERS	150	1
MDL-40	30	1
B.LOADERS	150	1
BAG CARTS	1,300	0
TRAILERS	1,200	22
UBL-2	22	0
CPT-3	6	0

* MAXIMUM AT PEAK RATE

ATTACHMENT III-A

FMC CORPORATION
AIRLINE EQUIPMENT DIVISION
RACT EQUIVALENCE

MAXIMUM DAILY VOC EMISSIONS (PEAK RATE)

COATING	A #VOC/GAL EX WATER	B %VOLUME SOLIDS	C %VOLUME SOLVENTS	D SOLVENT DENSITY (#/GAL) (A/C)	E #VOC/GAL SOLIDS (#/GAL) (A/B)	F APPL RATE (GAL/UNIT)	G QTY UNITS	H GALLONS COATINGS APPLIED (F*G)	I GALLONS SOLIDS APPLIED (B*H)	J # VOC EMITTED (E*I)
PRIMER:										
LL.LOADER	2.9	62.8%	37.2%	7.8	4.6	5.3	0.7	3.6	2.2	10
MDL-40	2.9	62.8%	37.2%	7.8	4.6	10.5	0.1	1.4	0.9	4
B.LOADERS	2.9	62.8%	37.2%	7.8	4.6	1.8	0.6	1.0	0.6	3
BAG CARTS	2.9	62.8%	37.2%	7.8	4.6	0.4	0.0	0.0	0.0	0
TRAILERS	2.9	62.8%	37.2%	7.8	4.6	0.5	22.0	11.0	6.9	32
UBL-2	2.9	62.8%	37.2%	7.8	4.6	2.3	0.1	0.2	0.1	1
CPT-3	2.9	62.8%	37.2%	7.8	4.6	2.3	.0	0.1	.0	0
TOTAL PRIMER ONLY:								17.3	10.9	50
TOPCOAT:										
LL.LOADER	3.5	48.7%	51.3%	6.8	7.2	12.0	1.0	12.0	5.8	42
MDL-40	3.5	48.7%	51.3%	6.8	7.2	22.0	1.0	22.0	10.7	77
B.LOADERS	3.5	48.7%	51.3%	6.8	7.2	4.0	1.0	4.0	1.9	14
BAG CARTS	3.5	48.7%	51.3%	6.8	7.2	0.6	0.0	0.0	0.0	0
TRAILERS	3.5	48.7%	51.3%	6.8	7.2	1.0	22.0	22.0	10.7	77
UBL-2	3.5	48.7%	51.3%	6.8	7.2	4.6	0.0	0.0	0.0	0
CPT-3	3.5	48.7%	51.3%	6.8	7.2	5.8	0.0	0.0	0.0	0
TOTAL TOPCOAT ONLY:								60.0	29.2	210

TOTAL PRIMER AND TOPCOAT VOC EMISSIONS: 260

ATTACHMENT III-A

FMC CORPORATION
AIRLINE EQUIPMENT DIVISION
RACT EQUIVALENCE

ANNUAL VOC EMISSIONS (MAX. PRODUCTION)

COATING	A #VOC/GAL EX WATER	B %VOLUME SOLIDS	C %VOLUME SOLVENTS	D SOLVENT DENSITY (#/GAL) (A/C)	E #VOC/GAL SOLIDS (#/GAL) (A/B)	F APPL RATE (GAL/UNIT)	G QTY UNITS	H GALLONS COATINGS APPLIED (F*G)	I GALLONS SOLIDS APPLIED (B*H)	J # VOC EMITTED (E*I)
PRIMER:										
LL.LOADER	2.9	62.8%	37.2%	7.8	4.6	5.3	150	787.5	494.6	2,284
MDL-40	2.9	62.8%	37.2%	7.8	4.6	10.5	30	315.0	197.8	914
B.LOADERS	2.9	62.8%	37.2%	7.8	4.6	1.8	150	262.5	164.9	761
BAG CARTS	2.9	62.8%	37.2%	7.8	4.6	0.4	1,300	520.0	326.6	1,508
TRAILERS	2.9	62.8%	37.2%	7.8	4.6	0.5	1,200	600.0	376.8	1,740
UBL-2	2.9	62.8%	37.2%	7.8	4.6	2.3	22	50.6	31.8	147
CPT-3	2.9	62.8%	37.2%	7.8	4.6	2.3	6	13.8	8.7	40
TOTAL PRIMER ONLY:								2,549.4	1,601.0	7,393
TOPCOAT:										
LL.LOADER	3.5	48.7%	51.3%	6.8	7.2	12.0	150	1,800.0	876.6	6,300
MDL-40	3.5	48.7%	51.3%	6.8	7.2	22.0	30	660.0	321.4	2,310
B.LOADERS	3.5	48.7%	51.3%	6.8	7.2	4.0	150	600.0	292.2	2,100
BAG CARTS	3.5	48.7%	51.3%	6.8	7.2	0.6	1,300	780.0	379.9	2,730
TRAILERS	3.5	48.7%	51.3%	6.8	7.2	1.0	1,200	1,200.0	584.4	4,200
UBL-2	3.5	48.7%	51.3%	6.8	7.2	4.6	22	101.2	49.3	354
CPT-3	3.5	48.7%	51.3%	6.8	7.2	5.8	6	34.8	16.9	122
TOTAL TOPCOAT ONLY:								5,176.0	2,520.7	18,116

TOTAL PRIMER AND TOPCOAT VOC EMISSIONS: 25,509

Conduct a personal inspection of the facility the week of 9-10-84 Chuck

1. UPDATE COS
2. TO ENFORCEMENT IF NOT THEIR ALREADY

FMC Corporation

Airline Equipment Division
7300 Presidents Drive
Box 13400
Orlando Florida 32859
305 851 3377

August 31, 1984

State of Florida
Department of Environmental Regulation
St. Johns River District
3319 Maguire Boulevard, Suite 232
Orlando, FL 32803-3767

ATTN: Mr. A. T. Sawicki, P.E.,
Air Engineering

RE: Orange County - AP
Permit #A048-70342
Three Paint Spray Booth
FMC Corporation
Airline Equipment Division Plant
Orlando, Florida

Dear Mr. Sawicki:

This letter responds to items in the August 7, 1984 letter from the Florida Department of Environmental Regulation (DER) regarding the FMC Annual Operating Report submitted to DER on February 29, 1984 pursuant to Permit No. A048-70342, air emission sources from three spray paint booths at the FMC Corporation, Airline Equipment Division facility, located at 7300 Presidents Drive, Orlando, Florida. The DER letter states that based on the Annual Report the referenced air emission sources are not in compliance in several respects with conditions in the permit, and further states that the annual coatings test report and semi-annual status report for the facility are overdue.

FMC notified DER by telephone on August 23, 1984, confirmed by letter dated August 24, 1984, that information regarding air emissions and paint usage with respect to the paint spray booths was being reviewed in order to respond to the DER statements concerning permit compliance. FMC also advised DER that the two referenced reports were being prepared.

We address each of the DER statements below and in the attachments.

1. The Annual Coatings Test Report is Attachment I to this letter. This report is required by Specific Condition 18 of the Permit, which condition provides as follows:

"All coatings shall be tested for compliance with our [DER] Rule yearly from the date of June 1, 1983. [EPA] Method 24 shall be utilized."

The Coatings Report demonstrates that since the change to high-solids paints for primer and top coat painting, on a weighted average basis these paints comply with the "Reasonably Available Control Technology (RACT) standard of 3.5 pounds of volatile organic compounds (VOCs) per gallon of coating, excluding water, delivered to the coating applicator. [Rule 17-2.650 (1)(f)14.b.(i)(B), Florida Air Pollution Rules]. As referenced in Attachment I, the coatings used prior to the changeover had higher VOC content.

2. The semi-annual status report is Attachment II to this letter. This report is required by Specific Condition 11 of the Permit, which condition provides as follows:

"Conventional acrylic paints shall be replaced with high-solid alkyd paint by 1984. The applicant shall report status of development of the new paint to the Department St. Johns River District office semi-annually."

This status report demonstrates that after an unsuccessful evaluation of high-solid alkyd paint FMC has obtained alternate paints which, on a weighted average basis, meet the RACT standards of 3.5 pounds of VOC per gallon of coating, excluding water, delivered to the applicator. The alternate paints are an epoxy primer and a polyurethane top coat and were phased into use during the period of February - March 1984. The status is discussed in detail in Attachment II.

3. The August 7, 1984 DER letter states that based on the annual operating report submittted by FMC the booths are out of compliance with the permit inasmuch as "the reported VOC content of the paints and thinner exceeds the limit of 3.5 pounds VOC per gallon of coating, excluding water, listed in the permit." While FMC concurs that coatings used in 1983 and reported in the annual operating report exceeded 3.5 pounds VOC per gallon, we do not agree that this item, by itself, consititutes a non-compliance with permit conditions applicable in 1983. Attachment A to FMC's Application To Operate/Construct Air Pollution Sources references Section 17-2.16(5) of the Florida Air Pollution Regulations which was in effect at the time of application and which provides for the use of alternate means to abate emission of VOCs, if such alternate means will result in emissions equal to or lower than would result from the application of emission limiting standards. Attachment A to the Application states as pertiment:

> "Since a complying low-solvent [coatings] system is not available at this time in all the required colors, FMC proposes to improve the method of application such that the total VOC emissions will be less than a complying system."

In this regard, FMC proposed (1) to use electrostatic spray guns to improve coating transfer efficiency, and (2) due to reduced production rates during 1982 and 1983 actual VOC emissions would not achieve full production levels for which calculations were provided in the Application.

The Permit issued by DER effective October 28, 1983 acknowledges and accepts these proposals. Specific Condition 6 provides as follows:

> "The emissions limitations for this source fall under RACT, Rule 17-2.650(1)(f)14.b(i)(B) and is 3.5 pounds VOC per gallon of coating excluding water delivered to the applicator. Compliance with this rule is required in 1984".

Specific Condition 8 provides as follows:

> "The maximum production rate for this source shall not exceed:
>
> 24 loaders for 1982
> 248 loaders for 1983
> 308 loaders for 1984
>
> unless maximum VOC emissions are less than 12,597 pounds per year and 49 pounds per day."

Thus, FMC proposed and DER accepted an alternate program for control of VOC emissions in 1982 and 1983 while FMC developed and tested coatings that would meet the 3.5 pounds VOC per gallon standard. The latter was not in effect as a permit condition in 1983.

4. The 1983 annual operating report for the FMC Orlando facility does indicate that in 1983 total VOC emissions from the paint spray booths amounted to, or based on coatings usage data could have amounted to, 8.06 tons (16,139 pounds). This figure exceeds the 12,597 pounds per year value provided for in the Permit.

   We have reviewed the 1983 data and calculations provided in the 1983 annual operating report and have determined that these values are correct based on our records. We have also reviewed 1984 data to date and have determined that 1984 VOC emissions calculated based on coatings usage (1) have exceeded the Permit value of 49 pounds per day, and (2) for the period from January 1, 1984 through August 31, 1984 total 11,042 pounds.

Plant management has reviewed this situation and determined that some of the probable causes relate to equipment maintenance, procedures, and personnel changes. As a result, we are implementing the following program:

a. As described in Attachment II, the coatings have been changed to formulations which, on an average comply with the 3.5 pounds of VOC per gallon standard.

b. The internal record keeping system has been revised to provide positive tracking of paint usage with reports to the Manufacturing Management (myself) to assure that compliance is maintained.

c. The maintenance of spray coating equipment will be reviewed, any deficiencies found will be corrected, and procedures will be established to maintain equipment to minimize situations where excess coating might be applied.

d. Operating procedures will be reviewed and revised, if needed, to minimize the possibility of excessive coating usage.

e. The Orlando facility is obtaining the services of a qualified paint coating consultant to review the actions which have been implemented and to assure that adequate equipment, coatings, and procedures exist to maintain compliance in the future with Permit conditions.

Please be advised that FMC appreciates the importance of the Air Permit requirements and is implementing the program described above in an effort to attain and maintain compliance with them. However, in reviewing this situation, including the availability/non-availability of certain paints, the assumptions made when the application was prepared in 1981-1982, and intervening changes in economic and business conditions, it has become apparent that compliance with some of these requirements may not be achievable. Accordingly, we will be contacting the DER in the near future to arrange a meeting at an early, mutually convenient date to review this situation and possible courses of action to address it in detail.

In the meantime, if there are questions concerning the present letter and attachments, the program described, or if additional information is needed, please advise me.

Yours very truly,

Larry E McIntyre

Larry E. McIntyre
Manufacturing Manager

LEM/grh
Attachments

ATTACHMENT I

1984 COATINGS TEST RESULTS FOR VOLATILE ORGANIC COMPOUND CONTENT OF PRIMER AND TOPCOAT PAINTS

FMC Corporation, Airline Equipment Division, located at 7300 Presidents Drive, Orlando, Florida is required under specific Condition 18 of Operations Permit #A048-70342 to test all coatings for VOC content compliance with Florida DER Rule yearly from June 1, 1983 using (EPA) Method 24.

FMC obtained paint samples on December 14, 1983, January 16, 1984, June 5, 1984, August 20, 1984 and August 27, 1984. These samples were delivered to contract analytical laboratories in Florida for analysis. The results are shown in the attached table. All figures are representative of each paint in its catalyzed and reduced form "as applied at the applicator", excluding water.

The chart shows the water-reducible epoxy primer contains 2.90 pounds VOC per gallon. The manufacturer's material data sheets list this primer at 2.83 pounds VOC per gallon. The topcoat paints, all of which are high-solids polyurethanes, range from 3.02 to 3.78 pounds VOC per gallon. The weighted average of the topcoat paints, based on 1984 usage to date, is 3.47 pounds VOC per gallon. The arithmetic mean (non-averaged) is 3.56 pounds VOC per gallon. All samples are from the new water-reducible epoxy primer and high-solid polyurethane topcoat paints that were tested and accepted by FMC for application onto airline ground support equipment manufactured at this facility.

Acrylic enamel paints applied in 1983 and part of 1984 were not included in this sampling process. Instead, the sampling and analytical testing for VOC content was concentrated on the new paints used to replace the acrylics. The acrylics, if tested would average approximately 4.7 pounds VOC per gallon (Specific Condition 11 of Operations Permit #A048-70342 requires conventional acrylic paints to be replaced by high-solid paints by 1984).

1984 COATINGS TEST RESULTS FOR VOC CONTENT OF PRIMER AND TOPCOAT PAINTS*

PART NO.	COLOR	# VOC/GAL
PRIMER:		
100-0243	Lt. Blue	2.90
100-0243	Red Oxide	2.60
TOPCOATS:		
100-0228	White	3.40
100-0229	Gray	3.35
100-0232	Red	3.61
100-0233	Blue	3.69
100-0234	Yellow	3.34
100-0235	Brown	3.71
100-0237	White	3.55
100-0238	Red	3.65
100-0239	White	3.28
100-0240	White	3.51
100-0242	Blue	3.73
100-0244	Beige	3.43
100-0245	Yellow	3.71
100-0246	Blue	3.02
100-0247	Red	3.63
100-0248	Yellow	3.68
100-0249	Gold	3.68
100-0251	Blue	3.77
100-0254	Orange	3.78
100-0255	White	3.56
100-0257	Fawn	3.46
100-0258	Blue	3.67
	TOPCOAT AVERAGE (NON-WEIGHTED):	3.56 # VOC/GAL
**	TOPCOAT WEIGHTED AVERAGE :	3.47 # VOC/GAL

* LABORATORY ANALYSIS PERFORMED USING EPA METHOD 24

** WEIGHTED AVERAGE BASED ON YEAR-TO-DATE 1984 USAGE OF COLORS LISTED. WHITES, YELLOWS AND GRAYS ACCOUNT FOR APPROXIMATELY 72% OF TOTAL USAGE.

ATTACHMENT II

SEMI-ANNUAL REPORT
AUGUST 1984

STATUS OF THE DEVELOPMENT OF HIGH-SOLIDS PAINTS FOR USE AT THE FMC CORPORATION, AIRLINE EQUIPMENT DIVISION AT 7300 PRESIDENTS DRIVE, ORLANDO, FLORIDA SOURCE #A048-70342

FMC Corporation, Airline Equipment Division (AED), located at 7300 Presidents Drive, Orlando, Florida has been pursuing the development of high-solids paints for use on airline ground support equipment. The conditions of Operating Permit #A048-70342 requires FMC to develop paint coatings to comply with the RACT requirement, Rule 17-2.650(1)(f)14.b.(i)(B) which limits paint emissions to 3.5 pounds VOC per gallon, excluding water, delivered to the applicator as a replacement for conventional acrylic enamel paints applied at this facility. This report, which satisfies Specific Condition 11 of the Operating Permit, highlights FMC AED efforts in introducing the high-solids technology into the painting processes utilized at this facility.

FMC has tested paints from various paint manufacturers involved in the development of this technology. FMC found that since the technology was relatively new to the paint industry the availability of suitable paints that met FMC specifications for primers and topcoats was limited. In fact, FMC found some paint manufacturers reluctant to hasten development of high-solids because of the cost factor, particularly when informed of the low order quantities FMC would be requesting (FMC order quantities can range from 10 gallons to several hundred gallons, depending on customer color specs).

As stated in the semi-annual report dated May 12, 1983, FMC had found and arranged for the production scale evaluation of a high-solids alkyd paint. This paint, recommended after acceptable testing in a research laboratory environment, proved to be unacceptable in the manufacturing environment because of extended drying times and poor adhesion. The drying times exceeded 24 hours before the parts were able to be handled and some water entrapment was observed between the primer and topcoat causing the topcoat to bubble and peel. FMC products are sometimes shipped within 24 hours after painting. This makes the drying times a critical part of the paint processes.

To meet the shipping schedules, a faster drying paint would be required. The water entrapment was caused by inadequate drying of the water-reducible primer prior to topcoating with the high-solids alkyd paint. Additional attempts ended with similar results. It was determined that FMC could not accommodate the use of this paint on any of the products and was forced to continue using the conventional acrylic enamels.

By the 4th quarter of 1983, and as referenced in the semi-annual report dated November 10, 1983, FMC had become knowledgeable of the availability of a water-reducible epoxy primer and high-solids two-component polyurethane topcoat paints from two major paint manufacturers. These paints were reported to dry considerably faster and provide a higher quality finish and better performance than the high-solids alkyds. They consist of two reacting components (catalyst and paint components) that, when combined, initiate a chemical reaction to dry and harden the paint film. FMC contacted the manufacturers and arranged for a laboratory analysis for VOC content verification and for on-site line trials in December 1983 and January 1984.

The water-reducible epoxy primer is required to fully compliment the high-solids polyurethane topcoat in order to ensure best adhesion and performance. Based on the manufacturers data sheets, the VOC content was 2.83 pounds per gallon. The laboratory analysis, however, resulted in a measurement of 2.60 pounds VOC per gallon. Both figures exclude water (a recent analysis of the same primer of a different color presently used resulted in a measurement of 2.90 pounds VOC per gallon). FMC was pleased with the primer as it dried quickly, could be topcoated within thirty (30) minutes without water entrapment, and had considerably less overspray when compared to the primer previously used.

Four colors of a high-solid polyurethane topcoat were also tested for VOC content. The results averaged at 3.50 pounds VOC per gallon and had ranged from 3.34 to 3.69 pounds per gallon (recent laboratory analysis of 18 additional colors applied in 1984 average 3.47 pounds per gallon and range from 3.02 to 3.78).

Based on the above results, FMC contacted Florida Department of Environmental Regulations and arranged a meeting for January 25, 1984 to discuss the use of these paints. The outcome of the meeting was positive and FMC committed to using the water-reducible primer and polyurethanes.

Since January 1984, FMC has phased in the new epoxy primer and the polyurethane topcoat paints into the painting processes. In the process of phasing in the new paints, the remaining inventory of conventional primers and paints was used up.

FMC Corporation

Airline Equipment Division
7300 Presidents Drive
Box 13400
Orlando Florida 32859
305 851 3377

August 24, 1984

State of Florida
Department of Environmental Regulation
St. Johns River District
3319 Maguire Boulevard, Suite 232
Orlando, FL 32803-3767

ATTENTION: Mr. A. T. Sawicki, P.E., Air Engineering

RE: Orange County - AP Permit #A048-700342
FMC Corporation
Three Paint Spray Booth
DER Letter, August 7, 1984

Dear Mr. Sawicki:

We are responding to the August 7, 1984 letter from the Department of Environmental Regulation regarding the FMC Annual Operating Report submitted to DER on February 29, 1984 for Permit #A048-700342, air emission source from the three spray paint booths at the FMC Corporation, Airline Equipment Division facility at 7300 Presidents Drive, Orlando, Florida. The DER letter indicates the referenced air emission source is out of compliance with the conditions of the operating permit. The letter further states that the annual coatings test report and the semi-annual status report for the facility are overdue.

By this letter, FMC confirms the telephone conversation of August 23, 1984 between Larry E. McIntyre and A. T. Sawicki of DER and acknowledges receipt of the referenced DER letter. We are informing you that FMC is reviewing the information regarding air emissions from the paint spray booths and will respond as promptly as possible to the statements regarding permit compliance. Also, the two referenced reports are being prepared for submission to DER. We shall submit the reports and respond by letter no later than August 31, 1984.

Very truly yours,

Larry E. McIntyre

Larry E. McIntyre
Manufacturing Manager

Tom The source needs inspection.

STATE OF FLORIDA

DEPARTMENT OF ENVIRONMENTAL REGULATION

ST. JOHNS RIVER DISTRICT
3319 MAGUIRE BOULEVARD
SUITE 232
ORLANDO, FLORIDA 32803-3767

August 7, 1984

Mr. Jerry C. Sibley
Airline Equipment Division Manager
FMC Corporation, Airline Equipment Division
7300 Presidents Drive
Orlando, Florida 32809

OSJ-AP-84-0286

Orange County - AP
FMC Corporation
Three Paint Spray Booths
AO48-70342
VOC Paint Content

Dear Mr. Sibley:

Your annual operating report for the above-referenced source indicates this source is out of compliance with the conditions of the referenced operating permit. The reported VOC content of the paints and thinner exceeds the limit of 3.5 pounds VOC per gallon of coating, excluding water, listed in the permit. The daily and annual VOC emissions also exceed the limit of 49 pounds per day and 12,597 pounds per year, based upon a twelve-hour day. Also, specific condition 18 requires coating tests to be made annually, and, specific condition 11 requires a semi -annual status report to be submitted to this office, both of which are overdue.

The laboratory analysis used to determine the VOC content of the paints used should specify the ASTM method used.

If you have any questions, please write or call.

Sincerely,

A. T. Sawicki

A. T. Sawicki, P.E.
Air Engineering

ATS:rca

FMC Corporation

Airline Equipment Division
7300 Presidents Drive
Orlando Florida 32809
305 851 3377

FMC

February 29, 1984

State of Florida Department
of Environmental Regulations
St. Johns River District
3319 Maguire Boulevard
Suite 232
Orlando, Florida 32803

Subject: FMC Corporation
Annual Operation Report
A048-70341 and A048-70342

Dear Mr. Collins:

Enclosed you will find the annual operation reports for the air emission sources operated at our Orlando facility. The reports are for:

A. Hydraulic Tube Cleaner	Permit #A048-70341
B. Paint Spray Booths (3)	Permit #A048-70342

Please let me know if any additional information is needed.

Sincerely,

Jerry C. Sibley
Division Manager

Encl.

PERMIT NUMBER A048-70342

PAINT SPRAY BOOTHS

ANNUAL OPERATIONS REPORT

Best Available Copy

CALCULATIONS

A. RAW MATERIAL INPUT PROCESS WEIGHT

1. Solvents (Thinners): $\frac{(966 \text{ gal})(6.65 \text{ lb/gal})}{(2000 \text{ lb/ton})}$ = 3.31 tons

2. Primer Paint: $\frac{(1{,}177 \text{ gal})(10.16 \text{ lb/gal})}{(2000 \text{ lb/ton})}$ = 5.98 tons

3. Topcoat Paint: $\frac{(1{,}142 \text{ gal})(8.43 \text{ lb/gal})}{(2000 \text{ lb/ton})}$ = 4.81 tons

TOTAL = 10.10 tons

B. EMISSION RATES

Particulates:

1. Solvents (Thinners): $\frac{(966 \text{ gal})(0 \text{ lb solids/gal})}{(2000 \text{ lb/ton})}$ = 0.00 tons

2. Primer Paint: $\frac{(1{,}177 \text{ gal})(6.16 \text{ lb solids/gal})}{(2000 \text{ lb/ton})}$ = 3.63 tons

3. Topcoat Paint: $\frac{(1{,}142 \text{ gal})(4.22 \text{ lb solids/gal})}{(2000 \text{ lb/ton})}$ = 2.40 tons

TOTAL = 6.03 tons

- Assume 75% efficiency in painting with airspray electrostatic equipment:

$(1.0 - 0.75)(6.03 \text{ tons})$ = 1.51 tons

- Assume 90% particulate recovery with water wash booth system:

$(1.0 - 0.90)(1.51 \text{ tons})$ = 0.151 tons particulates

12 597 lbs = 6.299 tpy max

Hydrocarbons (VOC):

1. Solvents (Thinners): $\frac{(966 \text{ gal})(6.65 \text{ lb VOC/gal})}{(2000 \text{ lb/ton})}$ = 3.31 tons

2. Primer Paint: $\frac{(1{,}177 \text{ gal})(4.0 \text{ lb VOC/gal})}{(2000 \text{ lb/ton})}$ = 2.35 tons

3. Topcoat Paint: $\frac{(1{,}142 \text{ gal})(4.21 \text{ lb VOC/gal})}{(2000 \text{ lb/ton})}$ = 2.40 tons

TOTAL = 8.06 tons > 6.299 tpy max

1. 49 lb/hr limit

2. 3.5 lb VOC/gal coating - 41.0 lb/hr limit

3120 hrs/yr. 8.06 tons/yr × 2000 lb/ton ÷ 3120 hrs/yr = 5.17 lb/hr (12 hr/day) = 62 lb/day

* 49 lb/hr limit → (12 hr/day) 0 lb/day limit

STATE OF FLORIDA

DEPARTMENT OF ENVIRONMENTAL REGULATION

ST. JOHNS RIVER
DISTRICT

3319 MAGUIRE BOULEVARD
SUITE 232
ORLANDO, FLORIDA 32803

BOB GRAHAM
GOVERNOR

VICTORIA J. TSCHINKEL
SECRETARY

ALEX SENKEVICH
DISTRICT MANAGER

ANNUAL OPERATION REPORT FORM FOR AIR EMISSIONS SOURCES

For each permitted emission point, please submit a separate report for calendar year 19 83 prior to March 1st of the following year.

I GENERAL INFORMATION

1. Source Name: FMC CORPORATION, AIRLINE EQUIPMENT DIVISION
2. Permit Number: A048-70342
3. Source Address: 7300 PRESIDENTS DRIVE
   ORLANDO, FLORIDA 32809
4. Description of Source: PAINT SPRAY BOOTHS (3) - SMALL PARTS, LARGE WELDMENTS, AND FINISH PAINT BOOTHS

II ACTUAL OPERATING HOURS: 12 hrs/day 5 days/wk 52 wks/yr 3120 hr/yr

III RAW MATERIAL INPUT PROCESS WEIGHT: (List separately all materials put into process and specify applicable units if other than tons/yr)

Raw Material	Input Process Weight	
SOLVENTS (THINNERS)	3.31	tons/yr
PRIMER PAINT	5.98	tons/yr
TOPCOAT PAINTS	4.81	tons/yr
		tons/yr
		tons/yr

IV PRODUCT OUTPUT (Specify applicable units)

ok 74 LOADERS, 24 TRANSPORTERS, 564 SMALL TRAILERS

49 2-12-

V **TOTAL FUEL USAGE** including standby fuels. If fuel is oil, specify type and sulfur content (e.g., No. 6 oil with 1% S).

_____ 10^6 cubic feet Natural Gas _____ 10^3 Kerosene

_____ 10^3 gallons _____ Oil, _____ %S _____ tons Coal

_____ 10^3 gallons Propane _____ tons Carbonaceous

_____ 10^6 Black Liquor Solids _____ tons Refuse

Other (Specify type and units) _____

VI **EMISSION RATE(S)** (tons/yr)

0.151 Particulates _____ Sulfur Dioxide _____ Total Reduced Sulfur

_____ Nitrogen Oxide _____ Carbon Monoxide _____ Fluoride

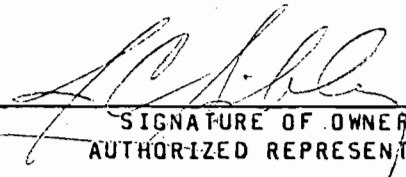
8.06 Hydrocarbon Other (Specify type and units) _____

VII **METHOD OF CALCULATING EMISSION RATES** (e.g., use of fuel and materials balance, emission factors drawn from AP 42, etc.)

SEE ATTACHED CALCULATION SHEET

VIII CERTIFICATION:

I hereby certify that the information given in this report is correct to the best of my knowledge.



SIGNATURE OF OWNER OR AUTHORIZED REPRESENTATIVE

JERRY C. SIBLEY, DIVISION MANAGER

TYPED NAME AND TITLE

2/29/84

DATE