Check Sheet

Company Name: MARTIN MARIETTA AEROSPACE
Permit Number: AC 48-084650 thru 084653, -085086
PSD Number:
Permit Engineer:

Application:

- [x] Initial Application
  - [x] Incompleteness Letters
  - [x] Responses
  - [ ] Waiver of Department Action
  - [ ] Department Response
  - [ ] Other

Cross References:

- [ ]
- [ ]
- [ ]

Intent:

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

Final Determination:

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

Post Permit Correspondence:

- [ ] Extensions/Amendments/Modifications
- [x] Other

In the folder labeled as follows there are documents, listed below, which were not reproduced in this electronic file. That folder can be found in one of the file drawers labeled Supplementary Documents Drawer. Folders in that drawer are arranged alphabetically, then by permit number.

Folder Name: Martin Marietta Aerospace

Permit(s) Numbered:

AC	48	-	084650
AC	48	-	084651
AC	48	-	084652
AC	48	-	084653
AC	48	-	085086

Period during which document was received:		Detailed Description
APPLICATION 2 APR 1984	1.	17"x22" BLUEPRINT: ASBESTOS DUST COLLECTING SYSTEM (DRAWING NUMBER: M3-1-M-8-C-022, SHEET 1 OF 2)
2 APR 1984	2.	17"x22" BLUEPRINT: ASBESTOS DUST COLLECTING SYSTEM (DRAWING NUMBER: M3-1-M-8-C-022, SHEET 2 OF 2)
2 APR 1984	3.	22"x34" BLUEPRINT: "B" LINE VENTILATION (DRAWING NUMBER: M87-IM 4/6-D3, SHEET 1 OF 6)
2 APR 1984	4.	22"x34" BLUEPRINT: "F" LINE VENTILATION (DRAWING NUMBER: M87-IM 4/6-D4, SHEET 2 OF 6)
2 APR 1984	5.	22"x34" BLUEPRINT: ROOF PLAN (DRAWING NUMBER: M87-IM 4/6-D5, SHEET 3 OF 6)
2 APR 1984	6.	22"x34" BLUEPRINT: DETAILS AND SCHEDULES (DRAWING NUMBER: M87-IM 4/6-D6, SHEET 4 OF 6)
2 APR 1984	7.	22"x34" BLUEPRINT: DETAILS AND SCHEDULES (DRAWING NUMBER: M87-IM 4/6-D7, SHEET 5 OF 6)
2 APR 1984	8.	22"x34" BLUEPRINT: DETAILS AND SCHEDULES (DRAWING NUMBER: M87-IM 4/6-D8, SHEET 6 OF 6)

P 408 533 660

RECEIPT FOR CERTIFIED MAIL

NO INSURANCE COVERAGE PROVIDED—
NOT FOR INTERNATIONAL MAIL

(See Reverse)

Sent to Mr. Richard C. Winfoeld	
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	1/20/86

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. Richard C. Winfield
Martin Marietta Aerospace
P. O. Box 5837 (MP-124)
Orlando, Florida 32855

4. Type of Service:

☐ Registered ☐ Insured
☒ Certified ☐ COD
☐ Express Mail

Article Number: P 408 533 660

Always obtain signature of addressee or agent and DATE DELIVERED.

5. Signature – Addressee
X

6. Signature – Agent
X

7. Date of Delivery
1-22-86

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. Richard C. Winfield
Director of Facilities
Martin Marietta Aerospace
Post Office Box 5837 (MP-124)
Orlando, Florida 32855

January 17, 1986

Enclosed are Permit Numbers AC 48-84650, AC 48-84651, AC 48-84652, AC 48-84653 and AC 48-85086 to Martin Marietta Aerospace which authorize the installation of four wet fume scrubbers and dust collector at the applicant's existing facility in Orlando, Orange County, Florida. These permits are issued pursuant to Section 403, Florida Statutes.

Any Party to these permits has the right to seek judicial review of the permits 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 these permits are filed with the clerk of the Department.

Sincerely,

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

Enclosure

cc: Tom Sawicki

CERTIFICATION

This is to certify that the foregoing Notice of Permit and all copies requested were mailed before the close of business on 20 JAN, 1986.

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 B. Adams
Clerk

Jan. 20, 1986
Date

Final Determination

Martin Marietta Aerospace
Orange County, Florida

Permit Numbers	
Wet Fume Scrubber S-1	AC 48-84650
Wet Fume Scrubber S-2	AC 48-84651
Wet Fume Scrubber S-3	AC 48-84652
Wet Fume Scrubber S-4	AC 48-84653
Dust Collector Unit No. 6	AC 48-85086

Florida Department of Environmental Regulation
Bureau of Air Quality Management
Central Air Permitting

January 15, 1986

Final Determination

Martin Marietta's application for permits to install four wet fume scrubber systems and dust collector at the applicant's existing facility in Orlando, Orange County, Florida, have been reviewed by the Bureau of Air Quality Management.

Public Notice of the Department's Intent to Issue the construction permit was published in the Orlando Sentinel on December 19, 1985.

The only comment received was from Mr. Raymond Green, Martin Marietta Aerospace (His comments were received by telephone conversation with Mrs. Teresa Heron on December 20, 1985, and January 10, 1986).

Mr. Green commented on the test methods to ensure compliance with the permitted emission rates. He agreed to the 5 percent opacity limitation for all scrubber systems. This limitation will read as follows on the final permits:

Visible emissions shall not exceed 5 percent opacity, 6 minute average. Compliance with the opacity limitation will be determined by reference Method 9. Visual Determination of the Opacity of Emission from Stationary Sources as described in Appendix A of 40 CFR 60. The Department will be notified 30 days in advance of the compliance test. The test will be conducted at 90 to 100 percent of permitted plant capacity.

The final action of the Department will be to issue the permits with the changes noted above.

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:
Martin Marietta Aerospace
P. O. Box 5837 (MP-124)
Orlando, Florida 32855

Permit Number: AC 48-084650
Expiration Date: June 30, 1986
County: Orange
Latitude/Longitude: 28° 26' 32" N/
81° 27' 39" W
Project: Wet Fume Scrubber
S-1, "B" Line

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 drawing(s), plans, and other documents attached hereto or on file with the department and made a part hereof and specifically described as follows:

For the construction of a Wet Fume Scrubber to exhaust and scrub the fumes from a series of plating tanks manifolded to a common exhaust system.

Construction shall be in accordance with the following permit application, plans, documents, attachments and drawings except as otherwise noted on pages 5 through 7, Specific Conditions.

Attachments:

1. Application to construct Air Pollution Sources, DER Form 17-1.122 (16).

2. Incompleteness letters of April 20, 1984, April 18, 1985 and September 13, 1985.

3. Martin Marietta Aerospace's letter of September 25, 1985.

PERMITTEE:
Martin Marietta Aerospace

Permit Number: AC 48-084650
Expiration Date: June 30, 1986

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:

Wet Fume Scrubber S-1, "B" Line

1. The maximum emission rate for this source shall not exceed 0.07 TPY Alkaline Cleaner.

2. The unit shall be allowed to operate 2080 hours per year.

PERMITTEE:
Martin Marietta Aerospace

Permit Number: AC 48-084650
Expiration Date: June 30, 1986

SPECIFIC CONDITIONS:

3. The construction shall reasonably conform to the plans and schedule submitted in the application. If the permittee is unable to complete construction on schedule, he must notify the Department in writing 60 days prior to the expiration date of the construction permit and submit a new schedule and request for an extension of the construction permit. (Rule 17-4.09 Florida Administrative Code)

4. To obtain a permit to operate, the permittee 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 St. Johns River 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. (Rule 17-4.22 and 17-4.23, Florida Administrative Code)

5. If the construction permit expires prior to the permittee requesting an extension or obtaining a permit to operate, then all activities at the project must cease and the permittee 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)

6. Upon obtaining an operating permit, the permittee will be required to submit annual reports on the actual operation and emissions of the facility to the Department's St. Johns River District office.

7. No objectionable odors are allowed from this facility.

PERMITTEE:
Martin Marietta Aerospace

Permit Number: AC 48-084650
Expiration Date: June 30, 1986

SPECIFIC CONDITIONS:

8. Visible emissions shall not exceed 5 percent opacity, 6 minute average. Compliance with the opacity limitation will be determined by reference Method 9. Visual Determination of the Opacity of Emission from Stationary Sources, as described in Appendix A of 40 CFR 60. The Department will be notified 30 days in advance of the compliance test. The test will be conducted at 90 to 100 percent of permitted plant capacity.

Issued this 16 day of January, 1986.

STATE OF FLORIDA DEPARTMENT
OF ENVIRONMENTAL REGULATION

Victoria J. Tschinkel
VICTORIA J. TSCHINKEL, Secretary

____ pages attached.

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:
Martin Marietta Aerospace
P. O. Box 5837 (MP-124)
Orlando, Florida 32855

Permit Number: AC 48-84651
Expiration Date: June 30, 1986
County: Orange
Latitude/Longitude: 28° 26' 32" N/
81° 27' 39" W
Project: Wet Fume Scrubber
S-2, "B" Line

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 drawing(s), plans, and other documents attached hereto or on file with the department and made a part hereof and specifically described as follows:

For the construction of a Wet Fume Scrubber to exhaust and scrub the fumes from a series of plating tanks manifolded to a common exhaust system.

Construction shall be in accordance with the following permit application, plans, documents, attachments and drawings except as otherwise noted on pages 5 through 7, Specific Conditions.

Attachments:

1. Application to construct Air Pollution Sources, DER Form 17-1.122 (16).

2. Incompleteness letters of April 20, 1984, April 18, 1985 and September 13, 1985.

3. Martin Marietta Aerospace's letter of September 25, 1985.

PERMITTEE:
Martin Marietta Aerospace

Permit Number: AC 48-084651
Expiration Date: June 30, 1986

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.

PERMITTEE:
Martin Marietta Aerospace

Permit Number: AC 48-084651
Expiration Date: June 30, 1986

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:

Wet Fume Scrubber S-2, "B" Line

1. The maximum emission rates for this source shall not exceed 0.03 TPY CrO_3 and 0.22 TPY $NaCr_2O_2$.

2. The unit shall be allowed to operate 2080 hours per year.

PERMITTEE:
Martin Marietta Aerospace

Permit Number: AC 48-084651
Expiration Date: June 30, 1986

SPECIFIC CONDITIONS:

3. The construction shall reasonably conform to the plans and schedule submitted in the application. If the permittee is unable to complete construction on schedule, he must notify the Department in writing 60 days prior to the expiration date of the construction permit and submit a new schedule and request for an extension of the construction permit. (Rule 17-4.09 Florida Administrative Code)

4. To obtain a permit to operate, the permittee 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 St. Johns River 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. (Rule 17-4.22 and 17-4.23 Florida Administrative Code)

5. If the construction permit expires prior to the permittee requesting an extension or obtaining a permit to operate, then all activities at the project must cease and the permittee 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)

6. Upon obtaining an operating permit, the permittee will be required to submit annual reports on the actual operation and emissions of the facility to the Department's St. Johns River District office.

7. No objectionable odors are allowed from this facility.

PERMITTEE:
Martin Marietta Aerospace

Permit Number: AC 48-084651
Expiration Date: June 30, 1986

SPECIFIC CONDITIONS:

8. Visible emissions shall not exceed 5 percent opacity, 6 minute average. Compliance with the opacity limitation will be determined by reference Method 9. Visual Determination of the Opacity of Emission from Stationary Sources, as described in Appendix A of 40 CFR 60. The Department will be notified 30 days in advance of the compliance test. The test will be conducted at 90 to 100 percent of permitted plant capacity.

Issued this 16 day of January, 1986.

STATE OF FLORIDA DEPARTMENT
OF ENVIRONMENTAL REGULATION

Victoria J. Tschinkel
VICTORIA J. TSCHINKEL, Secretary

____ pages attached.

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:
Martin Marietta Aerospace
P. O. Box 5837 (MP-124)
Orlando, Florida 32855

Permit Number: AC 48-084652
Expiration Date: June 30, 1986
County: Orange
Latitude/Longitude: 28° 26' 32" N/
81° 27' 39" W
Project: Wet Fume Scrubber
S-3, "F" Line

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 drawing(s), plans, and other documents attached hereto or on file with the department and made a part hereof and specifically described as follows:

For the construction of a Wet Fume Scrubber to exhaust and scrub the fumes from a series of plating tanks manifolded to a common exhaust system.

Construction shall be in accordance with the following permit application, plans, documents, attachments and drawings except as otherwise noted on pages 5 through 7, Specific Conditions.

Attachments:

1. Application to construct Air Pollution Sources, DER Form 17-1.122 (16).

2. Incompleteness letters of April 20, 1984, April 18, 1985 and September 13, 1985.
3. Martin Marietta Aerospace's letter of September 25, 1985.

PERMITTEE:
Martin Marietta Aerospace

Permit Number: AC 48-084652
Expiration Date: June 30, 1986

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:

Wet Fume Scrubber S-3, "F" Line

1. The maximum emission rates for this source shall not exceed 0.346 TPY HCl, 0.002 TPY Cr, and 0.097 TPY HNO_3/H_3PO_4.

2. The unit shall be allowed to operate 2080 hours per year.

PERMITTEE:
Martin Marietta Aerospace

Permit Number: AC 48-084652
Expiration Date: June 30, 1986

SPECIFIC CONDITIONS:

3. The construction shall reasonably conform to the plans and schedule submitted in the application. If the permittee is unable to complete construction on schedule, he must notify the Department in writing 60 days prior to the expiration date of the construction permit and submit a new schedule and request for an extension of the construction permit. (Rule 17-4.09 Florida Administrative Code)

4. To obtain a permit to operate, the permittee 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 St. Johns River 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. (Rule 17-4.22 and 17-4.23 Florida Administrative Code)

5. If the construction permit expires prior to the permittee requesting an extension or obtaining a permit to operate, then all activities at the project must cease and the permittee 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)

6. Upon obtaining an operating permit, the permittee will be required to submit annual reports on the actual operation and emissions of the facility to the Department's St. Johns River District office.

7. No objectionable odors are allowed from this facility.

PERMITTEE:
Martin Marietta Aerospace

Permit Number: AC 48-084652
Expiration Date: June 30, 1986

SPECIFIC CONDITIONS:

8. Visible emissions shall not exceed 5 percent opacity, 6 minute average. Compliance with the opacity limitation will be determined by reference Method 9. Visual Determination of the Opacity of Emission from Stationary Sources, as described in Appendix A of 40 CFR 60. The Department will be notified 30 days in advance of the compliance test. The test will be conducted at 90 to 100 percent of permitted plant capacity.

Issued this 16 day of January, 1986.

STATE OF FLORIDA DEPARTMENT
OF ENVIRONMENTAL REGULATION

Victoria J. Tschinkel

VICTORIA J. TSCHINKEL, Secretary

____ pages attached.

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:
Martin Marietta Aerospace
P. O. Box 5837 (MP-124)
Orlando, Florida 32855

Permit Number: AC 48-84653
Expiration Date: June 30, 1986
County: Orange
Latitude/Longitude: 28° 26' 32" N/
81° 27' 39" W
Project: Wet Fume Scrubber
S-4, "F" Line

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 drawing(s), plans, and other documents attached hereto or on file with the department and made a part hereof and specifically described as follows:

For the construction of a Wet Fume Scrubber to exhaust and scrub the fumes from a series of plating tanks manifolded to a common exhaust system.

Construction shall be in accordance with the following permit application, plans, documents, attachments and drawings except as otherwise noted on pages 5 through 7, Specific Conditions.

Attachments:

1. Application to construct Air Pollution Sources, DER Form 17-1.122 (16).

2. Incompleteness letters of April 20, 1984, April 18, 1985, and September 13, 1985.

3. Martin Marietta Aerospace's letter of September 25, 1985.

PERMITTEE:
Martin Marietta Aerospace

Permit Number: AC 48-084653
Expiration Date: June 30, 1986

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.

PERMITTEE:
Martin Marietta Aerospace

Permit Number: AC 48-084653
Expiration Date: June 30, 1986

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:

Wet Fume Scrubber S-4, "F" Line

1. The maximum emission rates for this source shall not exceed 0.01 TPY NaCN, 0.005 TPY NaOH and 0.02 TPY $Cd(CN)_2$.

2. The unit shall be allowed to operate 2080 hours per year.

PERMITTEE:
Martin Marietta Aerospace

Permit Number: AC 48-084653
Expiration Date: June 30, 1986

SPECIFIC CONDITIONS:

3. The construction shall reasonably conform to the plans and schedule submitted in the application. If the permittee is unable to complete construction on schedule, he must notify the Department in writing 60 days prior to the expiration date of the construction permit and submit a new schedule and request for an extension of the construction permit. (Rule 17-4.09 Florida Administrative Code)

4. To obtain a permit to operate, the permittee 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 St. Johns River 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. (Rule 17-4.22 and 17-4.23 Florida Administrative Code)

5. If the construction permit expires prior to the permittee requesting an extension or obtaining a permit to operate, then all activities at the project must cease and the permittee 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)

6. Upon obtaining an operating permit, the permittee will be required to submit annual reports on the actual operation and emissions of the facility to the Department's St. Johns River District office.

7. No objectionable odors are allowed from this facility.

PERMITTEE:
Martin Marietta Aerospace

Permit Number: AC 48-084653
Expiration Date: June 30, 1986

SPECIFIC CONDITIONS:

8. Visible emissions shall not exceed 5 percent opacity, 6 minute average. Compliance with the opacity limitation will be determined by reference Method 9. Visual Determination of the Opacity of Emission from Stationary Sources, as described in Appendix A of 40 CFR 60. The Department will be notified 30 days in advance of the compliance test. The test will be conducted at 90 to 100 percent of permitted plant capacity.

Issued this 16 day of January, 1986.

STATE OF FLORIDA DEPARTMENT
OF ENVIRONMENTAL REGULATION

Victoria Tschinkel
VICTORIA J. TSCHINKEL, Secretary

____ pages attached.

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:
Martin Marietta Aerospace
P. O. Box 5837 (MP-124)
Orlando, Florida 32855

Permit Number: AC 48-085086
Expiration Date: June 30, 1986
County: Orange
Latitude/Longitude: 28° 26' 36" N/
81° 27' 31" W
Project: Main Plant Dust
Collector Unit No. 6

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 drawing(s), plans, and other documents attached hereto or on file with the department and made a part hereof and specifically described as follows:

For the construction of a dust collector system, Sterment Co. Model TL-80 dust collector CY-36, and magna/back HEPA filters model-4, to exhaust (5,000 CFM) and collect ablative-type dust.

Construction shall be in accordance with the following permit application, plans, documents, attachments and drawings except as otherwise noted on pages 5 through 7, Specific Conditions.

Attachments:

1. Application to construct Air Pollution Sources, DER Form 17-1.122 (16).

2. Incompleteness letters of April 20, 1984, April 18, 1985 and September 13, 1985.

3. Martin Marietta Aerospace's letter of September 25, 1985.

PERMITTEE:
Martin Marietta Aerospace

Permit Number: AC 48-085086
Expiration Date: June 30, 1986

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.

PERMITTEE:
Martin Marietta Aerospace

Permit Number: AC 48-085086
Expiration Date: June 30, 1986

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:

Dust Collector Unit No. 6

1. The maximum emissions rate for this CFM dust collector system shall not exceed 0.04 tons/yr.

2. The unit shall be allowed to operate 2080 hours per year.

3. Visible emissions shall not exceed 5% opacity. Compliance with the opacity limitation will be determined by reference Method 9. Visual Determination of the Opacity of Emission from Stationary Sources, as described in Appendix A of 40 CFR. The Department will be notified 30 days in advance of the compliance test. The test will be conducted at 90 to 100% capacity.

PERMITTEE:
Martin Marietta Aerospace

Permit Number: AC 48-085086
Expiration Date: June 30, 1986

SPECIFIC CONDITIONS:

4. The construction shall reasonably conform to the plans and schedule submitted in the application. If the permittee is unable to complete construction on schedule, he must notify the Department in writing 60 days prior to the expiration date of the construction permit and submit a new schedule and request for an extension of the construction permit. (Rule 17-4.09 Florida Administrative Code)

5. To obtain a permit to operate, the permittee 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 St. Johns River 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. (Rule 17-4.22 and 17-4.23 Florida Administrative Code)

6. If the construction permit expires prior to the permittee requesting an extension or obtaining a permit to operate, then all activities at the project must cease and the permittee 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)

7. Upon obtaining an operating permit, the permittee will be required to submit annual test reports on the actual operation and emissions of the facility to the Department's St. Johns River District office.

PERMITTEE:
Martin Marietta Aerospace

Permit Number: AC 48-085086
Expiration Date: June 30, 1986

SPECIFIC CONDITIONS:

Issued this 16 day of January, 1986.

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 OTHER THAN THE ADDRESSEE

To: Clair Fancy Loctn: _____
To: _____ Loctn: _____
To: _____ Loctn: _____
From: V.J. Date: 1/16

TO: Victoria J. Tschinkel

FROM: Clair Fancy

DATE: January 15, 1986

SUBJ: Approval of Attached Air Construction Permits

Attached for your approval and signature are five Air Construction Permits to Martin Marietta Aerospace to install four wet fume scrubbers and dust collector at the applicant's existing facility in Orlando, Orange County, Florida.

Day 90, after which the permits would be issued by default, is January 19, 1986.

The Bureau recommends your approval and signature.

CF/pa

Attachment

DER
JAN 17 1986
BAQM

RECEIVED
JAN 15 1986
Office of the Secretary

The Orlando Sentinel

Published Daily
Orlando, Orange County, Florida

ADVERTISING CHARGE $84.79

State of Florida } SS.
COUNTY OF ORANGE

Before the undersigned authority personally appeared

Catherine Deering, 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 Notice of Agency Action in the matter of Permits to Martin Marietta Aerospace in the Court, was published in said newspaper in the issues of December 19, 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.

Sworn to and subscribed before me this 20th day of December A.D., 1985

Notary Public, State of Florida at Large
My Commission Expires May 25, 1987
Bonded by American Pioneer Casualty Ins. Co.

Notary Public

Seal

FORM NO. AD-262

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

The Department of Environmental Regulation gives notice of its intent to issue permits to Martin Marietta Aerospace to install four wet fume scrubber systems and dust collector at its facility in 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 constitutes 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.

DER
DEC 23 1985
BAQM

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
Bureau of Air Quality Management
2600 Blair Stone Road
Tallahassee, Florida 32301
Dept. of Environmental Regulation
St. Johns River District
3319 Maguire Blvd., Suite 232
Orlando, Florida 32803.

Any person may send written comments on the proposed action to Mr. Bill Thomas at the department's Tallahassee address. All comments mailed within 14 days of the publication of this notice will be considered in the department's final determination.

CL-563 Dec.19,1985

P 408 533 337

RECEIPT FOR CERTIFIED MAIL

NO INSURANCE COVERAGE PROVIDED—
NOT FOR INTERNATIONAL MAIL

(See Reverse)

Sent to Mr. Richard Winfield	
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	

12/10/85

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. Richard C. Winfield
Martin Marietta Aerospace
P. O. Box 5837 (MP-124)
Orlando, FL 32855

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

Article Number
P 408-533 337

Always obtain signature of addressee or agent and DATE DELIVERED.

5. Signature – Addressee
X

6. Signature – Agent
X

7. Date of Delivery
12/15/85

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

DER
DEC 16 1985
BAQM

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

December 10, 1985

CERTIFIED MAIL-RETURN RECEIPT REQUESTED

Mr. Richard C. Winfield
Director of Facilities
Martin Marietta Aerospace
P. O. Box 5837 (MP-124)
Orlando, Florida 32855

Dear Mr. Winfield:

Attached is one copy of the Technical Evaluation and Preliminary Determination, and proposed permits to install four wet fume scrubber systems and dust collector at your facility in Orlando, Orange County, Florida.

Before final action can be taken on your draft permits, 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. Failure to publish the notice may be grounds for denial of the permits.

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: Charles Collins

BEFORE THE STATE OF FLORIDA
DEPARTMENT OF ENVIRONMENTAL REGULATION

In the Matter of	)	
Application for Permits by:	)	DER File No. AC 48-84650
	)	AC 48-84651
Martin Marietta Aerospace	)	AC 48-84652
P. O. Box 5837 (MP-124)	)	AC 48-84653
Orlando, Florida 32855	)	AC 48-85086

INTENT TO ISSUE

The Department of Environmental Regulation hereby gives notice of its Intent to Issue, and proposed order of issuance for, permits 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, Martin Marietta Aerospace, applied on March 23, 1984, to DER for permits to install four wet fume scrubber systems and dust collector at the applicant's 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 air construction permits were 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

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 10 day of December, 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:

Mr. Richard C. Winfield
Mr. Charles Collins

CERTIFICATION

This is to certify that the foregoing Intent to Issue and all copies were mailed before the close of business on 10 Dec, 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
Dec. 10, 1985 — Date

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

The Department of Environmental Regulation gives notice of its intent to issue permits to Martin Marietta Aerospace to install four wet fume scrubber systems and dust collector at its facility in 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 constitutes 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
Bureau of Air Quality Management
2600 Blair Stone Road
Tallahassee, Florida 32301

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

Any person may send written comments on the proposed action to Mr. Bill Thomas at the department's Tallahassee address. All comments mailed within 14 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.

Technical Evaluation
and
Preliminary Determination

Martin Marietta Aerospace
Orange County, Florida

Permit Numbers	
Wet Fume Scrubber S-1	AC 48-84650
Wet Fume Scrubber S-2	AC 48-84651
Wet Fume Scrubber S-3	AC 48-84652
Wet Fume Scrubber S-4	AC 48-84653
Dust Collector Unit No. 6	AC 48-85086

Florida Department of Environmental Regulation
Bureau of Air Quality Management
Central Air Permitting

December 6, 1985

I. NAME AND ADDRESS OF APPLICANT

Martin Marietta Aerospace
P. O. Box 5837 MP-124
Orlando, Florida 32855

II. REVIEWING AND PROCESS SCHEDULE

Date of receipt of application: March 23, 1984 and April 2, 1984

Completeness Review (30 days): April 19, 1985

Request for additional information: Incompleteness letters of April 20, 1984, April 18, 1985, and September 13, 1985.

Response to Incompleteness letter: September 25, 1985.

Application completeness date: September 25, 1985.

III. FACILITY INFORMATION

Facility Location

The proposed facility is located at 4600 Sand Lake Road in Orlando, Florida. The UTM coordinates are 454.5 km East and 3146.2 km North.

Standard Industrial Classification Code (SIC)

This facility is classified as follows:

Major Group - 34 Fabricated Metal Products, Except Machinery and Transportation Equipment

Group No. - 347 Coating, Engraving, and Allied services

Industry No. - 3471 Electroplating, Plating, Polishing, Anodizing and Coloring

Facility Category

Martin Marietta Aerospace is classified as a minor emitting facility. Emissions of particulate matter (PM) and volatile organic emissions (VOC) are in the order of 62 TPY and 8 tons per year respectively. These emissions are compiled in the Air Pollutant Inventory System (APIS). The company reported in their emissions inventory the following data: PM emissions (23 TPY), SO_2 emissions (66 TPY), NO_x emissions (44 TPY), VOC emissions (3 TPY) and acid fumes emissions (3 TPY).

This facility category, Chemical Process Plant (electroplating process), is on the list of the 28 Major facilities categories, Table 500-1, Chapter 17-2, Florida Administrative Code.

IV. PROJECT DESCRIPTION

Martin Marietta Aerospace plans to install 4 wet fume scrubber systems and a dust collector at its facility in Orlando. The scrubbers will exhaust and scrub the fumes from a series of plating tanks manifolded to a common exhaust system. These scrubbers will have different nominations (S-1, S-2, S-3, S-4) and will serve different plating tank lines (B and F) as indicated in the applications submitted.

Background Information

As a response to the incompletenes letter sent by the department, a list of all operating permits showing the quantity of pollutants escaping from the process equipment, the amount removed by the control equipment, and emissions to the atmosphere was provided.

It is concluded that the emissions at this facility are in the order of 62 tons per year particulate matter, 8 tons per year volatile organic compounds, and 3 tons per year acid fumes. No potential emissions of any criteria pollutants from any equipment operation or chemical process at this facility are over 250 tons per year.

V. PROCESS DESCRIPTION AND POLLUTION CONTROL SYSTEM

Electroplating is a process used to deposit, or plate, a coating or metal upon the surface of another metal by electrochemical reactions. An electroplating system consists of two electrodes-an anode and a cathode-immersed in an electrolyte and connected to an external source of direct-current electricity. The base material upon which the plating is to be deposited makes up the cathode. In most electroplating systems, a bar of the metal to be deposited is used as the anode. The electrolyte is a solution containing: (1) Ions of the metal to be deposited and (2) additional dissolved materials to aid in electrical conductivity and produce desirable characteristics in the deposited plating.

At Martin Marietta, the plating shop incorporates several wet chemical processes for the plating, cleaning, etching and anodizing of various metal components used in the manufacturing of weapons systems.

There are no pollutant emissions from the primary cleaning process. Exhaust emissions from caustic cleaners are controlled

by wet scrubbers. Organic solvent cleaning operations utilize vapor degreasing and condensing with no discharge of emissions.

Dust Collector System No. 6

This sytem will exhaust and collect ablative-type dust. This ablative type dust consists of silica phenolic, asbestos phenolic, quartz-filled epoxy resin and graphite. Ablative materials used in flight controls on guided missiles are manufactured in this area requiring cutting, grinding, and sanding of these materials.

VI. RULE APPLICABILITY

State Regulations

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

The plant site, Orange County, is in an area designated attainment for all criteria pollutants and a maintenance area for ozone in accordance with Rule 17-2.420, and 17-2.460, Florida Admininstrative Code.

This facility, Martin Marietta Company, is a minor emitting facility for all criteria pollutants as defined in Chapter 17-2 because the potential emissions of each of the criteria pollutants are less than 100 TPY. The total emissions which are generated from this modification are summarized in Table 1.

The proposed project shall be permitted under Rule 17-2.520, Sources not Subject to Prevention of Significant Deterioration or Nonattainment Requirements.

The proposed facility shall comply with Rule 17-2.610(2), General Particulate Emission Limiting Standards and Rule 17-2.620(1) and (2), General Pollutant Emission Limiting Standard.

VII. SOURCE IMPACT ANALYSIS

VII.1 Emission Limitations

The installation and operation of the wet scrubber system will control acid emissions. Specifically, chromic acid, hydrochloric acid, nitric acid, phosphoric acid, NaOH, NaCN, and $Cd(CN)_2$.

The installation of a dust collector system, which controls operations from cutting, grinding, and sanding materials produce emissions of ablative dust. This type of dust consists of silica

phenolic, asbestos phenolic, quartz-filled epoxy resin and graphite.

Table 1 summarizes potential to emit all pollutants regulated under the Act which are affected by the proposed project. All chemical compounds used during the process are limited by permit conditions. These permitted emissions are in compliance with all applicable requirements of Chapter 17-2 Florida Administrative Code.

VII.2 Air Quality Analysis

From a technical review of the applications, the Department has determined that the installation and operation of these sources will not have a detrimental impact on Florida's ambient air quality stnadards.

VII.3 Air Toxics Information

Currently, the Department is developing acceptable ambient concentrations for toxics substances. Specifically, sources classified as Category A (carcinogens and highly toxics) and Category B (moderately toxics substances).

In the event toxics emission limits are set during the term of this permit or any subsequent permit which are different than the permitted emissions, the department may seek modification pursuant to 17-4.08 Florida Administrative Code.

VIII. CONCLUSION

Based on review of the data submitted by Martin Marietta Aerospace, the Florida Department of Environmental Regulation (FDER) concluded that compliance with all applicable state air quality regulations will be achieved provided certain specific conditions are met. The impact of installing and operating the wet scrubber systems and dust collector at the Martin Marietta Aerospace facility will not cause of contribute to a violation of any ambient air quality standard.

Table 1

SUMMARY OF EMISSIONS

(tons per year)

Source	Pollutant	
Scrubber S-1 "B" line	0.07	Alkaline Cleaner
Scrubber S-2 "B" line	0.03	CrO_3 (as Cr)
	0.22	$NaCr_2O_2$ (as Cr)
Scrubber S-3 "F" line	0.346	HCl
	0.002	Cr
	0.097	HNO_3/H_3PO_4
Scrubber S-4 "F" line	0.01	NaCN
	0.005	NAOH
	0.02	$Cd(CN)_2$
Dust Collector No. 6	0.04	Ablative dust*

* Ablative type dust consist of silica phenolic, asbestos phenolic, quartz-filled, epoxy resin and graphite

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:
Martin Marietta Aerospace
P. O. Box 5837 (MP-124)
Orlando, Florida 32855

Permit Number: AC 48-084650
Expiration Date: April 30, 1986
County: Orange
Latitude/Longitude: 28° 26' 32" N/
81° 27' 39" W
Project: Wet Fume Scrubber
S-1, "B" Line

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 drawing(s), plans, and other documents attached hereto or on file with the department and made a part hereof and specifically described as follows:

For the construction of a Wet Fume Scrubber to exhaust and scrub the fumes from a series of plating tanks manifolded to a common exhaust system.

Construction shall be in accordance with the following permit application, plans, documents, attachments and drawings except as otherwise noted on pages 5 through 7, Specific Conditions.

Attachments:

1. Application to construct Air Pollution Sources, DER Form 17-1.122 (16).

2. Incompleteness letters of April 20, 1984, April 18, 1985 and September 13, 1985.

3. Martin Marietta Aerospace's letter of September 25, 1985.

PERMITTEE:
Martin Marietta Aerospace

Permit Number: AC 48-084650
Expiration Date: April 30, 1986

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:

Wet Fume Scrubber S-1, "B" Line

1. The maximum emission rate for this source shall not exceed 0.07 TPY Alkaline Cleaner.

2. The unit shall be allowed to operate 2080 hours per year.

PERMITTEE:
Martin Marietta Aerospace

Permit Number: AC 48-084650
Expiration Date: April 30, 1986

SPECIFIC CONDITIONS:

3. The construction shall reasonably conform to the plans and schedule submitted in the application. If the permittee is unable to complete construction on schedule, he must notify the Department in writing 60 days prior to the expiration date of the construction permit and submit a new schedule and request for an extension of the construction permit. (Rule 17-4.09 Florida Administrative Code)

4. To obtain a permit to operate, the permittee 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 St. Johns River 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. (Rule 17-4.22 and 17-4.23, Florida Administrative Code)

5. If the construction permit expires prior to the permittee requesting an extension or obtaining a permit to operate, then all activities at the project must cease and the permittee 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)

6. Upon obtaining an operating permit, the permittee will be required to submit annual reports on the actual operation and emissions of the facility to the Department's St. Johns River District office.

7. Reasonable precautions to prevent fugitive particulate emissions during construction such as coating or spraying roads and construction sites used by contractors will be taken by the permittee.

8. No objectionable odors are allowed from this facility.

PERMITTEE:
Martin Marietta Aerospace

Permit Number: AC 48-084650
Expiration Date: April 30, 1986

SPECIFIC CONDITIONS:

Issued this_____day of_____,
19__.

STATE OF FLORIDA DEPARTMENT
OF ENVIRONMENTAL REGULATION

_____
VICTORIA J. TSCHINKEL, Secretary

____ pages attached.

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:
Martin Marietta Aerospace
P. O. Box 5837 (MP-124)
Orlando, Florida 32855

Permit Number: AC 48-84651
Expiration Date: April 30, 1986
County: Orange
Latitude/Longitude: 28° 26' 32" N/
81° 27' 39" W
Project: Wet Fume Scrubber
S-2, "B" Line

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 drawing(s), plans, and other documents attached hereto or on file with the department and made a part hereof and specifically described as follows:

For the construction of a Wet Fume Scrubber to exhaust and scrub the fumes from a series of plating tanks manifolded to a common exhaust system.

Construction shall be in accordance with the following permit application, plans, documents, attachments and drawings except as otherwise noted on pages 5 through 7, Specific Conditions.

Attachments:

1. Application to construct Air Pollution Sources, DER Form 17-1.122 (16).

2. Incompleteness letters of April 20, 1984, April 18, 1985 and September 13, 1985.

3. Martin Marietta Aerospace's letter of September 25, 1985.

PERMITTEE:
Martin Marietta Aerospace

Permit Number: AC 48-084651
Expiration Date: April 30, 1986

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:

Wet Fume Scrubber S-2, "B" Line

1. The maximum emission rates for this source shall not exceed 0.03 TPY $Cr\ O_3$ and 0.22 TPY $NaCr_2O_2$.

2. The unit shall be allowed to operate 2080 hours per year.

PERMITTEE:
Martin Marietta Aerospace

Permit Number: AC 48-084651
Expiration Date: April 30, 1986

SPECIFIC CONDITIONS:

3. The construction shall reasonably conform to the plans and schedule submitted in the application. If the permittee is unable to complete construction on schedule, he must notify the Department in writing 60 days prior to the expiration date of the construction permit and submit a new schedule and request for an extension of the construction permit. (Rule 17-4.09 Florida Administrative Code)

4. To obtain a permit to operate, the permittee 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 St. Johns River 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. (Rule 17-4.22 and 17-4.23 Florida Administrative Code)

5. If the construction permit expires prior to the permittee requesting an extension or obtaining a permit to operate, then all activities at the project must cease and the permittee 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)

6. Upon obtaining an operating permit, the permittee will be required to submit annual reports on the actual operation and emissions of the facility to the Department's St. Johns River District office.

7. Reasonable precautions to prevent fugitive particulate emissions during construction such as coating or spraying roads and construction sites used by contractors will be taken by the permittee.

8. No objectionable odors are allowed from this facility.

PERMITTEE:
Martin Marietta Aerospace

Permit Number: AC 48-084651
Expiration Date: April 30, 1986

SPECIFIC CONDITIONS:

Issued this_____day of_____,
19__.

STATE OF FLORIDA DEPARTMENT
OF ENVIRONMENTAL REGULATION

_____
VICTORIA J. TSCHINKEL, Secretary

____ pages attached.

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:
Martin Marietta Aerospace
P. O. Box 5837 (MP-124)
Orlando, Florida 32855

Permit Number: AC 48-084652
Expiration Date: April 30, 1986
County: Orange
Latitude/Longitude: 28° 26' 32" N/
81° 27' 39" W
Project: Wet Fume Scrubber
S-3, "F" Line

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 drawing(s), plans, and other documents attached hereto or on file with the department and made a part hereof and specifically described as follows:

For the construction of a Wet Fume Scrubber to exhaust and scrub the fumes from a series of plating tanks manifolded to a common exhaust system.

Construction shall be in accordance with the following permit application, plans, documents, attachments and drawings except as otherwise noted on pages 5 through 7, Specific Conditions.

Attachments:

1. Application to construct Air Pollution Sources, DER Form 17-1.122 (16).

2. Incompleteness letters of April 20, 1984, April 18, 1985 and September 13, 1985.
3. Martin Marietta Aerospace's letter of September 25, 1985.

PERMITTEE:
Martin Marietta Aerospace

Permit Number: AC 48-084652
Expiration Date: April 30, 1986

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:

Wet Fume Scrubber S-3, "F" Line

1. The maximum emission rates for this source shall not exceed 0.346 TPY HCl, 0.002 TPY Cr, and 0.097 TPY HNO_3/H_3PO_4.

2. The unit shall be allowed to operate 2080 hours per year.

PERMITTEE:
Martin Marietta Aerospace

Permit Number: AC 48-084652
Expiration Date: April 30, 1986

SPECIFIC CONDITIONS:

3. The construction shall reasonably conform to the plans and schedule submitted in the application. If the permittee is unable to complete construction on schedule, he must notify the Department in writing 60 days prior to the expiration date of the construction permit and submit a new schedule and request for an extension of the construction permit. (Rule 17-4.09 Florida Administrative Code)

4. To obtain a permit to operate, the permittee 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 St. Johns River 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. (Rule 17-4.22 and 17-4.23 Florida Administrative Code)

5. If the construction permit expires prior to the permittee requesting an extension or obtaining a permit to operate, then all activities at the project must cease and the permittee 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)

6. Upon obtaining an operating permit, the permittee will be required to submit annual reports on the actual operation and emissions of the facility to the Department's St. Johns River District office.

7. Reasonable precautions to prevent fugitive particulate emissions during construction such as coating or spraying roads and construction sites used by contractors will be taken by the permittee.

8. No objectionable odors are allowed from this facility.

PERMITTEE:
Martin Marietta Aerospace

Permit Number: AC 48-084652
Expiration Date: April 30, 1986

SPECIFIC CONDITIONS:

Issued this_____day of_____,
19__.

STATE OF FLORIDA DEPARTMENT
OF ENVIRONMENTAL REGULATION

_____
VICTORIA J. TSCHINKEL, Secretary

____ pages attached.

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:
Martin Marietta Aerospace
P. O. Box 5837 (MP-124)
Orlando, Florida 32855

Permit Number: AC 48-84653
Expiration Date: April 30, 1986
County: Orange
Latitude/Longitude: 28° 26' 32" N/
81° 27' 39" W
Project: Wet Fume Scrubber
S-4, "F" Line

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 drawing(s), plans, and other documents attached hereto or on file with the department and made a part hereof and specifically described as follows:

For the construction of a Wet Fume Scrubber to exhaust and scrub the fumes from a series of plating tanks manifolded to a common exhaust system.

Construction shall be in accordance with the following permit application, plans, documents, attachments and drawings except as otherwise noted on pages 5 through 7, Specific Conditions.

Attachments:

1. Application to construct Air Pollution Sources, DER Form 17-1.122 (16).

2. Incompleteness letters of April 20, 1984, April 18, 1985, and September 13, 1985.

3. Martin Marietta Aerospace's letter of September 25, 1985.

PERMITTEE:
Martin Marietta Aerospace

Permit Number: AC 48-084653
Expiration Date: April 30, 1986

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:

Wet Fume Scrubber S-4, "F" Line

1. The maximum emission rates for this source shall not exceed 0.01 TPY NaCN, 0.005 TPY NaOH and 0.02 TPY $Cd(CN)_2$.

2. The unit shall be allowed to operate 2080 hours per year.

PERMITTEE:
Martin Marietta Aerospace

Permit Number: AC 48-084653
Expiration Date: April 30, 1986

SPECIFIC CONDITIONS:

3. The construction shall reasonably conform to the plans and schedule submitted in the application. If the permittee is unable to complete construction on schedule, he must notify the Department in writing 60 days prior to the expiration date of the construction permit and submit a new schedule and request for an extension of the construction permit. (Rule 17-4.09 Florida Administrative Code)

4. To obtain a permit to operate, the permittee 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 St. Johns River 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. (Rule 17-4.22 and 17-4.23 Florida Administrative Code)

5. If the construction permit expires prior to the permittee requesting an extension or obtaining a permit to operate, then all activities at the project must cease and the permittee 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)

6. Upon obtaining an operating permit, the permittee will be required to submit annual reports on the actual operation and emissions of the facility to the Department's St. Johns River District office.

7. Reasonable precautions to prevent fugitive particulate emissions during construction such as coating or spraying roads and construction sites used by contractors will be taken by the permittee.

8. No objectionable odors are allowed from this facility.

PERMITTEE:
Martin Marietta Aerospace

Permit Number: AC 48-084653
Expiration Date: April 30, 1986

SPECIFIC CONDITIONS:

Issued this_____day of_____,
19__.

STATE OF FLORIDA DEPARTMENT
OF ENVIRONMENTAL REGULATION

_____
VICTORIA J. TSCHINKEL, Secretary

____ pages attached.

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:
Martin Marietta Aerospace
P. O. Box 5837 (MP-124)
Orlando, Florida 32855

Permit Number: AC 48-085086
Expiration Date: April 30, 1986
County: Orange
Latitude/Longitude: 28° 26' 36" N/
81° 27' 31" W
Project: Main Plant Dust
Collector Unit No. 6

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 drawing(s), plans, and other documents attached hereto or on file with the department and made a part hereof and specifically described as follows:

For the construction of a dust collector system, Sterment Co. Model TL-80 dust collector CY-36, and magna/back HEPA filters model-4, to exhaust (5,000 CFM) and collect ablative-type dust.

Construction shall be in accordance with the following permit application, plans, documents, attachments and drawings except as otherwise noted on pages 5 through 7, Specific Conditions.

Attachments:

1. Application to construct Air Pollution Sources, DER Form 17-1.122 (16).

2. Incompleteness letters of April 20, 1984, April 18, 1985 and September 13, 1985.

3. Martin Marietta Aerospace's letter of September 25, 1985.

PERMITTEE:
Martin Marietta Aerospace

Permit Number: AC 48-085086
Expiration Date: April 30, 1986

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:

Dust Collector Unit No. 6

1. The maximum emissions rate for this CFM dust collector system shall not exceed 0.04 tons/yr.

2. The unit shall be allowed to operate 2080 hours per year.

3. Visible emissions shall not exceed 5% opacity. Compliance with the opacity limitation will be determined by reference Method 9. Visual Determination of the Opacity of Emission from Stationary Sources as described in Appendix A of 40 CFR. The Department will be notified 30 days in advance of the compliance test. The test will be conducted at 90 to 100% capacity.

SPECIFIC CONDITIONS:

4. The construction shall reasonably conform to the plans and schedule submitted in the application. If the permittee is unable to complete construction on schedule, he must notify the Department in writing 60 days prior to the expiration date of the construction permit and submit a new schedule and request for an extension of the construction permit. (Rule 17-4.09 Florida Administrative Code)

5. To obtain a permit to operate, the permittee 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 St. Johns River 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. (Rule 17-4.22 and 17-4.23 Florida Administrative Code)

6. If the construction permit expires prior to the permittee requesting an extension or obtaining a permit to operate, then all activities at the project must cease and the permittee 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)

7. Upon obtaining an operating permit, the permittee will be required to submit annual test reports on the actual operation and emissions of the facility to the Department's St. Johns River District office.

8. Reasonable precautions to prevent fugitive particulate emissions during construction such as coating or spraying roads and construction sites used by contractors will be taken by the permittee.

PERMITTEE:
Martin Marietta Aerospace

Permit Number: AC 48-085086
Expiration Date: April 30, 1986

SPECIFIC CONDITIONS:

Issued this_____day of_____,
19__.

STATE OF FLORIDA DEPARTMENT
OF ENVIRONMENTAL REGULATION

_____
VICTORIA J. TSCHINKEL, Secretary

____ pages attached.

MARTIN MARIETTA AEROSPACE

POST OFFICE BOX 5837
ORLANDO, FLORIDA 32855

September 23, 1985

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

RE: APPLICATION NUMBERS AC48-84650 THROUGH AC48-84653 AND AC48-85086

The following information is provided to satisfy the Departments request for additional information on the above described permit application.

SECTION II

GENERAL PROJECT INFORMATION

(1) According to Florida Administrative Code, Rule 17-2.100(109) and (145), Martin Marietta Corporation is not a major emitting facility.

(2) No potential emissions of any criteria pollutants from any equipment operation or chemical process at this facility are over 250 tons per year.

(3) Table 1 is a list of all operating permits showing the quantity of pollutants escaping from the process equipment, the amount removed by the control equipment, and emissions to the atmosphere.

(4) Tanks F-61 and F-68 are currently permitted with no pollution control equipment. The application for Wet Fume Scrubber S-3, "F" Line, includes these tanks as being exhausted through the scrubber system. There is no inconsistency since the existing permits will no longer be applicable after the scrubber system is permitted.

PROCESS DESCRIPTION

(1) The plating shop incorporates several wet chemical processes for the plating, cleaning, etching and anodizing of various metal components used in the manufacturing of weapon systems.

(2) There are no pollutant emissions from the primary cleaning processes. Exhaust emitting from caustic cleaners are provided for in the proposed scrubbers. Organic solvent cleaning operations utilize vapor degreasing and condensing with no discharge of emissions.

(3)

SCRUBBER #	TANK #	DIMENSIONS (FT)
S-1	B-2	4(w) x 20(L) x 5 (D)
	B-5	4 x 20 x 5
S-2	B-7	3.5 x 20 x 5
	B-8	4 x 20 x 5
	B-9	3.5 x 20 x 5
S-3	F-61	4 x 12 x 5
	F-68	3 x 12 x 5
	F-70	3 x 12 x 5
	F-72	3 x 12 x 5
S-4	F-63	3 x 12 x 5
	F-64	3 x 12 x 5

(4) 5-30 Amperes per square foot.

(5) Slotted plenums are adjusted to maintain 1200 Ft/min velocity. See attached drawing for design specifications.

(6) 1-3 g pm.

(7) Scrubber and components which interface with fumes are constructed of acid resistant polyvinyl material.

(8) The second stage of each scrubber consists of a deep pack of polypropylene packing media which collects the spraying water and offers the demisting effect. Please refer to F.10. on applications for further description. (See attached Page 9 of 10)

SECTION III SECTION V

AIRBORNE CONTAMINANTS EMITTED

(1) See attached manufacturers data.

(2) Past sampling performed by Safety Engineers show below OSHA permissible threshold limit values.

RE: AC48-85056 (DUST COLLECTOR SYSTEM NO. 6)

(1) Ablative materials used in flight controls on guided missiles are manufactured in this area requireing cutting, grinding, and sanding of these materials. (See Sec. III c. of application for materials used)

(2) Please see attached design specifications and manufacturer's efficiency data included on Page 9 of 10 of the application.

Please contact me should you have questions on the enclosed information.

R. F. Green

Raymond F. Green
Staff Engineer

TABLE 1

PERMIT NO.	DESCRIPTION (POLLUTANT TYPE)	POLLUTANT INPUT (T/YR)	AMOUNT REMOVED (T/YR)	EMISSIONS TO ATMOSPHERE (T/YR)
A048-50091	BOILER NO. 1			
	(PARTICULATE	1.5	N/A	1.5
(NO. 4 FUEL OIL)	(SO_2	33	N/A	33
	(NO_x	22	N/A	22
A048-50089	BOILER NO. 2			
	(PARTICULATES	1.5	N/A	1.5
(NO. 4 FUEL OIL)	(SO_2	33	N/A	33
	(NO_x	22	N/A	22
A048-50092	DUST COLL. NO. 1	N/A(1)	N/A(1)	N/A(1)
A048-50095	DUST COLL. NO. 2	N/A	N/A	N/A
A048-50096	DUST COLL. NO. 3			
	PARTICULATES	3.333	3.332	0.001
A048-50094	DUST COLL. NO. 4	N/A	N/A	N/A
A048-50093	DUST COLL. NO. 5	N/A	N/A	N/A
A048-50256	E-LINE SCRUBBER #1			
	CAUSTIC	0.325	0.310	0.015
	ACID	1.05	0.84	0.21
A048-50257	E-LINE SCRUBBER #2			
	ACID	2.4	2.35	0.05
A048-50258	E-LINE SCRUBBER #3			
	ACID	2.74	2.55	0.19
A048-50259	E-LINE SCRUBBER #4			
	CHROMIUM	0.6	0.576	0.024
	ACID	0.14	0.12	0.02
	NICKEL SALT	0.11	0.178	0.022
A048-52471	MAINT WOOD SHOP DUST COLL.			
	PARTICULATE	6.4	5.76	0.64
A048-52472	FAB SHOP GRINDERS			
	PARTICULATE	214	211.86	2.14
A048-52474	PEL COLLECTOR			
	PARTICULATE	128	115.2	12.8
A048-52477	PAINT BOOTH M-99			
	PARTICULATE	.12	.108	.012
	HYDROCARBONS	1.0	.99	.1
A048-52478	PAINT BOOTH #1			
	PARTICULATE	.24	.216	.024
	HYDROCARBONS	2.0	1.8	0.20

PERMIT NO.	DESCRIPTION (POLLUTANT TYPE)	POLLUTANT INPUT (T/YR)	AMOUNT REMOVED (T/YR)	EMISSION TO ATMOSPHERE (T/YR)
A048-52479	PAINT BOOTH #2			
	PARTICULATE	.24	.216	.024
	HYDROCARBON	2.0	1.8	0.20
A048-52475	PAINT BOOTH #3			
	PARTICULATE	.10	.095	.005
	HYDROCARBON	.76	.722	.038
A048-88169	PAINT BOOTH #4			
	PARTICULATE	.28	.266	.014
	HYDROCARBON	2.28	2.166	.114
A048-52480	BINKS BOOTH			
	PARTICULATE	.24	.216	.024
	HYDROCARBON	2.0	1.8	0.20
A048-34548	COPPERHEAD PAINT BOOTH			
	PARTICULATE	2.2	2.09	.11
	HYDROCARBON	2.72	2.58	.136
A048-96199	COPPERHEAD HEAT TREAT			
	PARTICULATES	12.2	10.98	1.22
A048-52832	SAND BLAST FACIL			
	PARTICULATES	300	297.	3.0
A048-52833	WOOD SHOP CALL BLDG 10			
	ABANDONED	--	--	--
A048-55145	TANK C-25			
	ACID FUMES	0.49	--	0.49
A048-55146	TANK C-24B			
	ACID FUMES	0.29	--	0.29
A048-55147	TANK F-61			
	ACID FUMES	0.2	--	0.2
A048-55149	TANK C-22			
	ACID FUMES	0.1	--	0.1
A048-55150	TANK F-66	TANK EMPTY FOR THREE YEARS		
	ACID FUMES			
A048-55151	TANK F-68			
	ACID FUMES	0.015	--	0.015
A048-100823	MEC ACID EXHAUST			
	ACID FUMES	2.65	2.385	0.265
	CAUSTIC FUMES	0.47	0.423	0.047
A048-100824	MEC SOLVENT EXHAUST			
	HYDROCARBONS	16.4	14.76	1.64

(1) DUST COLLECTORS 1,2,4 & 5 HAVE BEEN RETURNED TO INSIDE PLANT AIR MAKE-UP SYSTEM.

(5) Environmental Manager:

(6) Telephone No.:

(7) Emissions*:

Contaminant	Rate or Concentration

(8) Process Rate*:

10. Reason for selection and description of systems:

A packed tower, wet fume scrubber is recognized by industry as an acceptable and efficient solution for the removal of contaminants in exhaust systems. In this system, contaminant removal is accomplished by first slowing the fumes to a velocity below 500 fpm and then passing the fumes through two scrubbing stages. The fumes first pass through a water spray or curtain during which a percentage of the larger contaminant particles drop out and the remaining fumes are saturated. The second stage consists of a deep pack of polyprcpylene, high surface, non-clogging, spherical plate packing media which is continuously wetted by the spray nozzles. The saturated fumes are impinged upon the packing and the contaminants are absorbed and carried away in the wash water.

*Applicant must provide this information when available. Should this information not be available, applicant must state the reason(s) why.

SECTION 15446

FUME SCRUBBER SYSTEM

PART 1 - GENERAL

1-01 DESCRIPTION

A. Furnish and install, as shown on drawings, complete fume scrubber systems of the horizontal cross flow type. The system shall be complete with packing, circulation pump, starters, disconnects and control wiring. Sizes and capacities as scheduled.

1-02 SUBMITTALS

A. Shop Drawings: Provide complete shop drawings on the entire system. Submittal shall include data on packing, pump, starter, disconnect, control wiring, power wiring and accessories. Provide dimensional data including placement on support structure.

B. Operation and Maintenance Manuals: Provide description of system operation and maintenance.

C. Manufacturer's Letter: Provide, prior to final inspection, letter stating that the scrubber system is correctly installed and properly operating.

1-03 MANUFACTURER AND TYPE

A. Fume scrubber shall be Type HF as manufactured by Harrison Plastics, Inc. or an approved equal.

PART 2 - PRODUCTS

2-01 SCRUBBER EQUIPMENT

A. Harrison Plastics, Inc., 1/4" grey PVC packaged, high efficiency, horizontal Fume Scrubbers each complete with a 30" irrigated packing depth consisting of 2" diameter polypropylene Intalox Saddles, CPVC pump and integral recirculating system including interconnecting PVC piping, 18" deep sump, 18" long inlet and outlet transitions, duct section a minimum length of 2.5 times the main conveying duct to attach the scrubber outlet with the blower inlet, automatic internal polypropylene float valve assembly to control sump level and separate eposy coated, 4" channel platforms for the scrubber and blower. The scrubber efficiency should be a minimum of 95% based on scrubbing hydrochloric acid fumes. The recirculation system should be capable of delivering a minimum of 4 gpm per 1000 CFM.

B. Pump recirculation piping to include the necessary straight pipe, fittings, companion flanges, gaskets, stainless steel bolts and nuts to interconnect the pump discharge with the liquid distributor inlet. A

pump mounting platform should be provided, to be field welded to the scrubber steel base. Recirculation system to include required straight pipe, tee, ball valve, P-trap and two companion flanges, gaskets, stainless steel bolts and nuts to interconnect the sump drain with sump overflow.

C. Fresh water makeup piping to include piping and fittings to interconnect the liquid makeup fill with the float valve assembly, including required straight pipe, 90° elbow, ball valve, tee, two companion flanges, gaskets, stainless steel bolts and nuts.

PART 3 - EXECUTION

3-01 INSTALLATION

A. Assemble scrubber sub-assemblies and like items in strict accordance with manufacturer's instructions.

B. Support ducts to prevent placing any load on scrubber.

C. All required water connection for make-up and supply shall be installed to suit manufacturer's requirements.

D. Power wiring, control wiring, starter, and disconnect shall be by Martin Marietta.

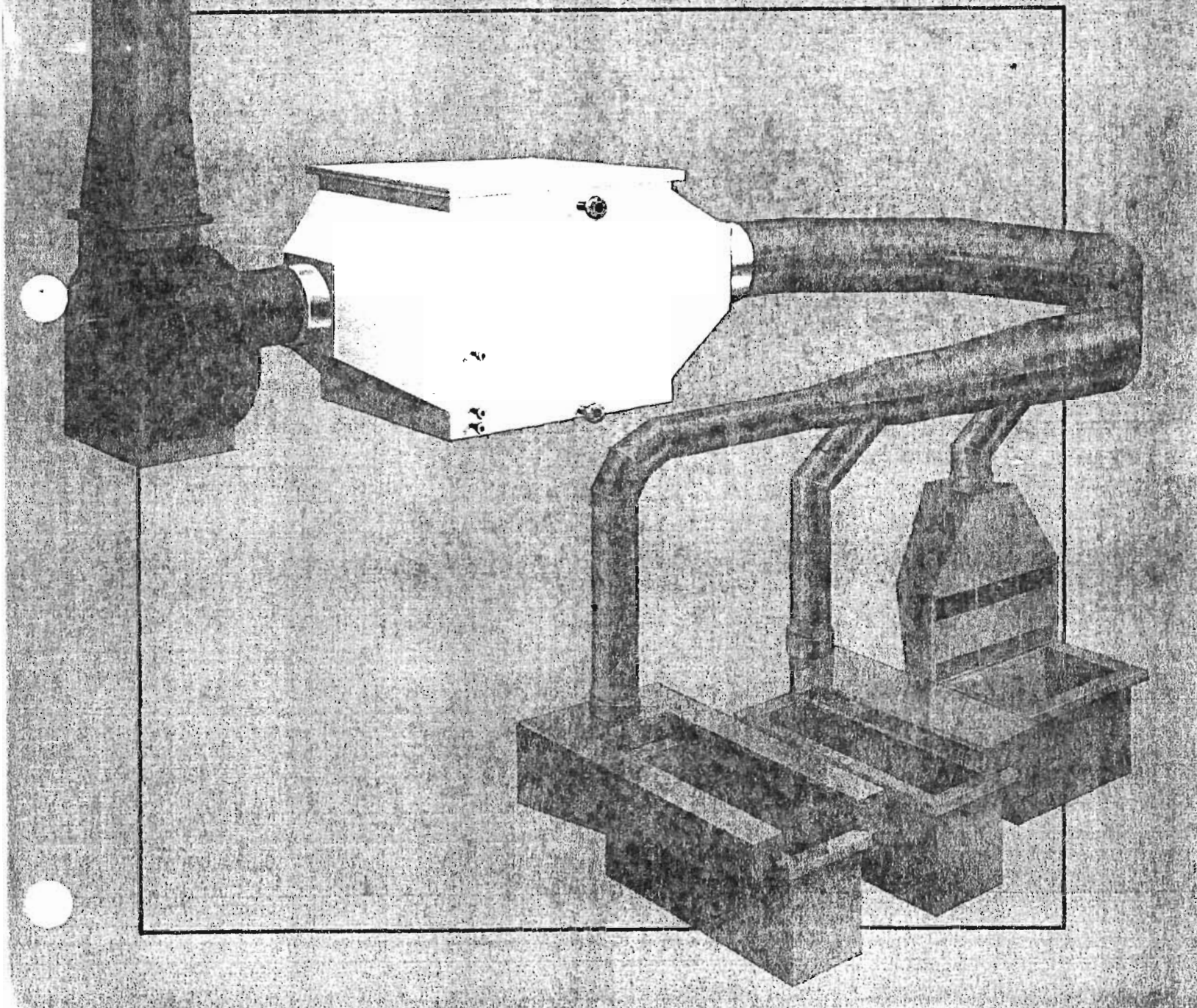
E. Provide check-out and start-up services of an authorized representative of the manufacturer who shall check alignment, drive adjustment, air flow quantities, through scrubber and system operation.

END
15446-2

650 AVE. B, S.
WINTER HAVEN, FLA. 33880
813 · 324-4000

Harrison

Plastic Packed Scrubbers



THE HARRISON SYSTEM

Harrison is a prime designer and producer of complete plastic exhaust systems, custom engineered scrubbing systems, as well as duct and fittings, tanks, and hoods. As a result of this capability and experience, design and manufacture of standard, pre-engineered fume scrubbers is a natural extension.

MATERIALS

Self-supporting or fiberglass armored PVC and Polypropylene, fiberglass armored Kynar, and solid fiberglass construction offers a wide range of resistance to acids, alkalis, solvents, and other corrosives at operating temperatures to approximately 250°F. Harrison systems do not use any metal in contact with the process stream.

PRE-ENGINEERING

Pre-engineered design reduces cost by eliminating the necessity to re-invent each item ordered. It results in more reliable service thru improved workmanship achieved by repetitive production control, and speeds quotations and approval drawings because costs and designs are immediately available. In addition to significant savings in approval and order time, Harrison reduces delivery time by stocking scrubber components including packing, support grids, distributor plates, nozzles, duct reducers, and sheet stock.

SCRUBBER CONFIGURATION

Most fume removal applications can be served by the two scrubber designs shown in this catalog. Vertical Counter Current style directs liquid down vertically, and unwanted fumes upward in the opposite direction. Horizontal Cross Flow unit directs liquid down vertically, but unwanted fumes are driven horizontally at 90° to the liquid. In both designs, liquid and fumes are inter-mixed in the packed bed section of the scrubber where fumes are removed by chemical reaction or water solubility. Scrubber shape does not affect performance. Horizontal design presents a low profile and is suitable where head room is limited. Verticals require more head room, but use only minimum floor space

SCRUBBER DESIGN AND OPERATION

Highest scrubber efficiency (volumetric % of contaminate removed) is obtained by having the proper amount of contact surface area (packing) wetted by sufficient liquid (recirculated liquid rate) for an optimum residence time (packing depth) to allow unwanted fumes to take a treacherous path thru the wetted packing to permit their maximum removal from the carrier air stream by chemical reaction or water solubility

Air stream resistance encountered in the packing (static pressure loss) is a function of air velocity, cross-sectional packing area, and packing depth. Harrison scrubbers utilize proven packing depth to achieve efficiencies approaching 99+%, when operated within recommendations.

LIQUID DISTRIBUTION AND MIST ELIMINATION

Simple liquid distribution is achieved thru a main header pipe feeding perforated laterals, without use of troublesome spray nozzles. Nozzles are subject to plugging, and produce a difficult-to-remove atomized mist carryover. In the Harrison design, any large droplets of liquid caught in the upward moving air stream are easily and efficiently removed by a short bed of dry packing located above the liquid distributor.

STATIC PRESSURE LOSS

Use of high-surface-area, low-pressure-drop plastic saddles in a balanced design result in low static pressure loss of only 0.4 inches H_2O (w.g.) per foot of packed depth in Vertical Counter Current scrubbers, and 0.33 in Horizontal Cross Flow units. At the same time, sufficient irrigation rates constantly keep saddles clear of potential sludge buildup. Thereby, continuous, non-clogging operation at a proper rate of intermixing turbulence between liquid and fumes is achieved for 99+% efficiency.

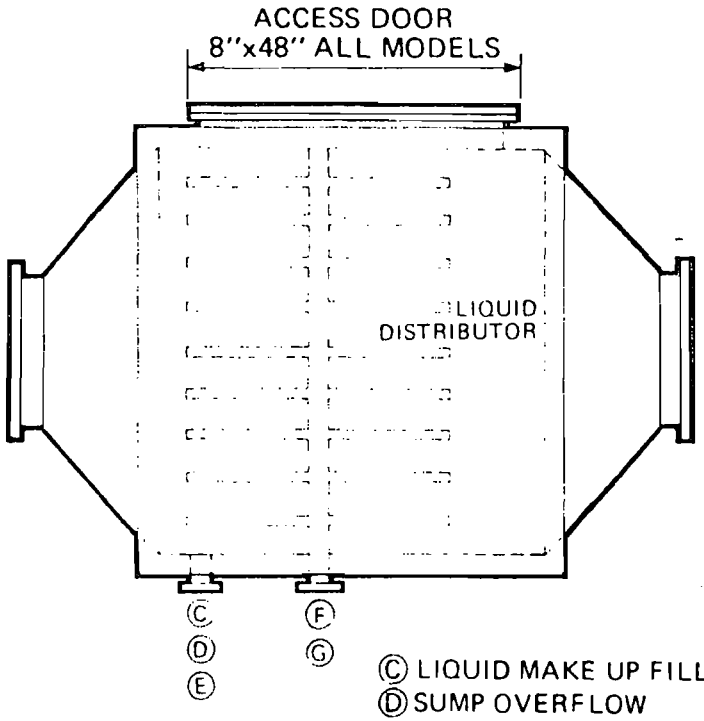
LIQUID SUMP OPERATION

Harrison scrubbers employ an integral liquid recirculating sump which reduces amount of liquid consumption required by 90 to 95% in most applications. Therefore, considerably less effluent must be handled and treated. The sump reservoir is contained within the scrubber itself. Harrison recommends optimum rate of effluent removal. When effluent is acidic only, additional liquid conservation can be obtained with either scrubber design with the simple optional recovery system shown with the vertical scrubber drawing on page 4. If central treating facilities exist, no sump, recirculation, or independent recovery is needed. In this case treated liquid would be directed over the packing in a single pass, then treated, then returned to the scrubber, etc. In both instances where effluent is treated, liquid consumption would be reduced to only that amount lost by evaporation.

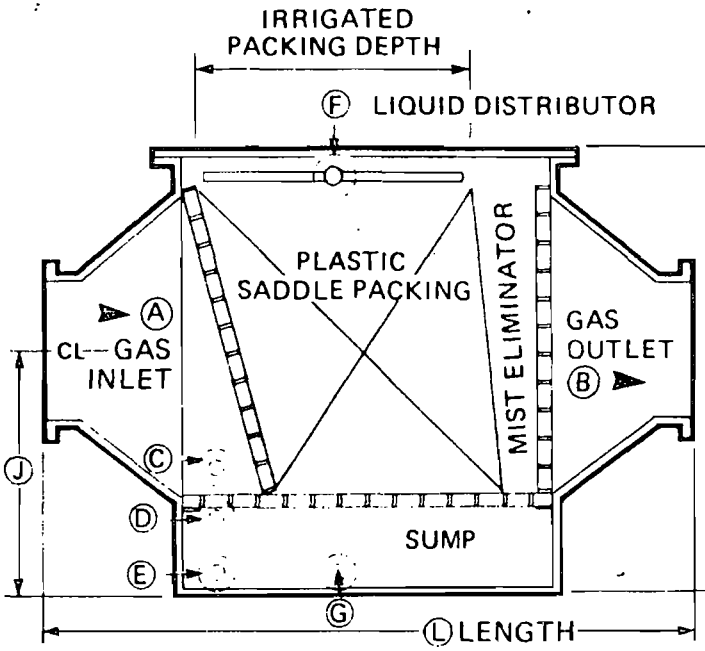
Harrison

Box 184 Aurora Ohio 44202/216-562-9545

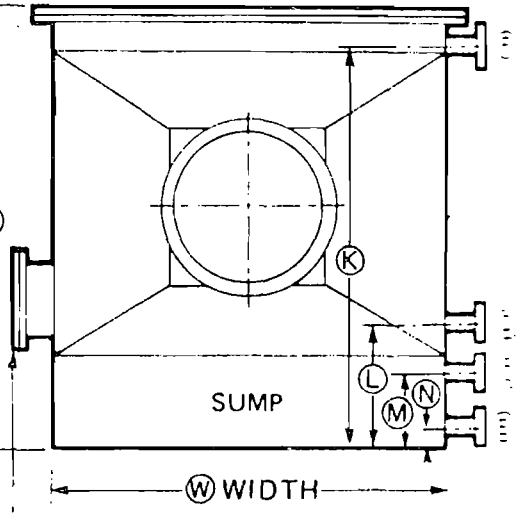
TOP VIEW



SIDE VIEW (CUT-A-WAY)



INLET SIDE VIEW



Ⓒ LIQUID MAKE UP FILL
Ⓓ SUMP OVERFLOW
Ⓔ SUMP DRAIN
Ⓕ LIQUID HEADER INLET
Ⓖ PUMP INLET

ALL LIQUID FLANGES STD ANSI 150# SERIES

ACCESS DOOR WITH BOLTED COVER

TRANSITIONAL ENDS/WITH SUMP

MODEL	CFM	LENGTH L - IN.	WIDTH W - IN.	HEIGHT H - IN.	PACK DEPTH IN.	A IN.	B IN.	C IN	D IN.	E IN.	F IN	G IN.	J IN.	K IN.	L IN.	M IN.	N IN	SUMP CAPACITY GALS.	RECIRC. LIQUID GPM	WEIGHT SHIP	WEIGHT OPER.	NUMB REQ

CUSTOMER _____

ADDRESS _____

JOB _____

ORDER _____ ITEM _____ TAG _____

MATERIAL _____

HARRISON ORDER _____ DRAWING # _____ DATE _____

HORIZONTAL CROSS FLOW PACKED SCRUBBERS

Box 184 Aurora Ohio 44202/216-562-9545

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

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

Description	Contaminants Type	Contaminants % Wt	Utilization Rate - lbs/hr	Relate to Flow Diagram
(1) Ablative - type (see below) Dust		1 grain / ft3	N/A	Magna-Pak filter

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

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

2. Product Weight (lbs/hr): _____

C. Airborne Contaminants Emitted:

Name of Contaminant	Emission[1] Maximum lbs/hr	Emission[1] Actual T/yr	Allowed Emission[2] Rate per Ch. 17-2, F.A.C.	Allowable[3] Emission lbs/hr	Potential Emission[4] lbs/hr	Potential Emission[4] T/yr	Relate to Flow Diagram
(1) ablative	0.04 T/yr		N/A	N/A	17.1	17.8	Magna-pak filter

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

Name and Type (Model & Serial No.)	Contaminant (1)	Efficiency	Range of Particles[5] Size Collected (in microns)	Basis for Efficiency (Sec. V, It[5])
Sternvent/dust collector Cy-36		99.6% by wt.	5 microns	Mfg Data
Sternvent/Pulse collector TL-80				
Magna/Pack Model-4		99.97%	.3 Microns	Mfg. Data

[1] See Section V, Item 2.

[2] Reference applicable emission standards and units (e.g., Section 17-2.05(6) Table II, E. (1), F.A.C. – 0.1 pounds per million BTU heat input)

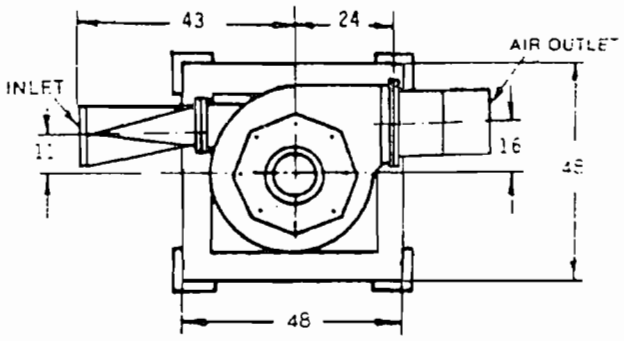
[3] Calculated from operating rate and applicable standard

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

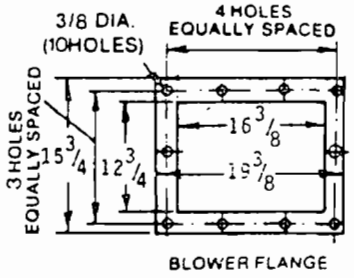
[5] If Applicable

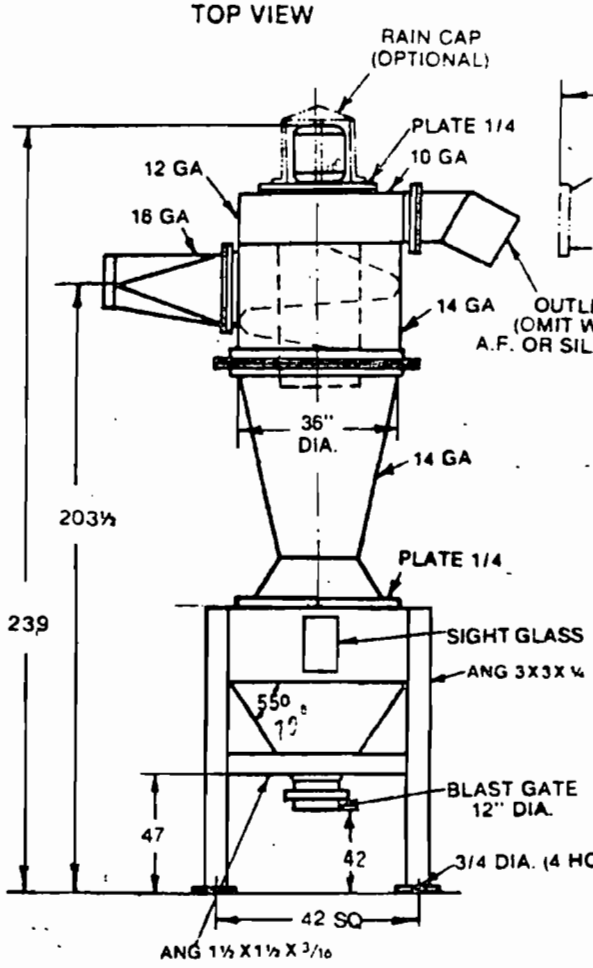
(1): Ablative-type dust consists of Silica Phenolic, asbestos phenolic, quartz-filled epoxy resin and graphite (some small quantities of aluminum)

JOB NO.

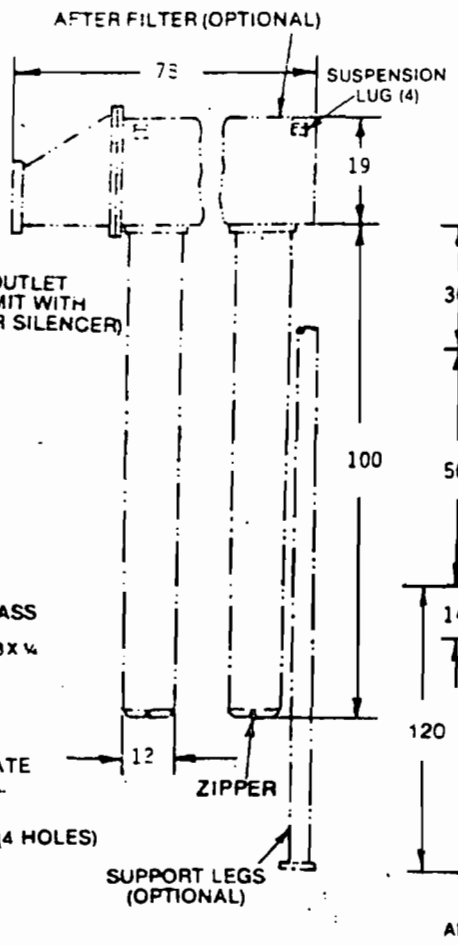


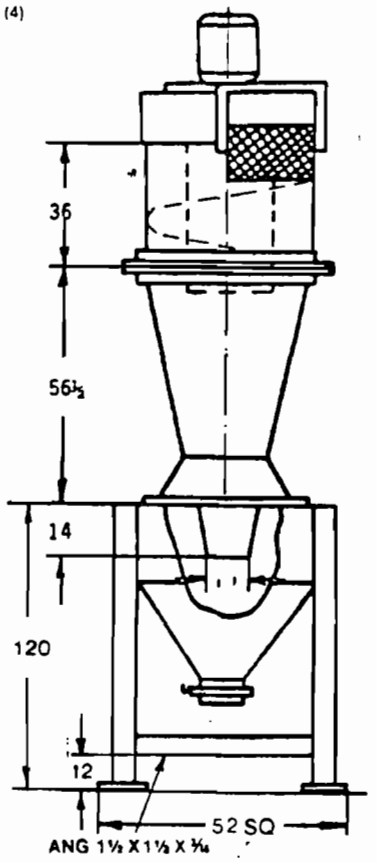
TOP VIEW





FRONT VIEW





SIDE VIEW

MULTIPLE RATING TABLES

MODEL CYH 3620-76

20HP	CFM.	EXT. SP.	INLET VEL.	ΔP.
1750 RPM	5000	10.7	3571	2.3
INLET 16"DIA	6000	8.7	4285	3.3
	7000	6.5	5000	4.5

MODEL

HP	CFM.	EXT. SP.	INLET VEL.	ΔP.
RPM				
INLET "DIA				

MODEL

HP	CFM.	EXT. SP.	INLET VEL.	ΔP.
RPM				
INLET "DIA				

SPECIFICATION

1. MOTOR TEFC 230/460V, 3 PH, 60 HZ
2. HOPPER CAPACITY 76 CU. FT
3. STD. FINISH: EXTERIOR RED OXIDE PRIMER & ONE COAT GRAY ENAMEL
4. SHIPPING WEIGHT 2100 LBS

NOTES

1. 12" CLEARANCE REQ. ABOVE MOTOR
2. INLET CAN BE ROTATED AT 90° INCREMENTS IN FIELD.
3. OUTLET CAN BE ROTATED AT 45° INCREMENTS IN FIELD.
4. THIS DRAWING NOT CERTIFIED FOR CONSTRUCTION PURPOSES UNLESS SIGNED BY STERNVENT ENG. DEPT.

CERTIFIED_____ DATE_____

OPTIONS

1. AFTER FILTER	300	SQ. FT.★	☐
2. SILENCER			☐
3. RAINCAP			☐
4. HOPPER ACCESS DOOR			☐
5. DRUM ASSEMBLY			☐
6. SPECIAL PAINT			☐
7. 16" DIAMETER AIR OUTLET			☐

★Additional filter area may be required for some applications. Dust drawer, hopper & enclosure available.

STERNVENT CO. INC.
BROOKLYN, N.Y. 11231

SPECIFICATION DRAWING
SERIES CY-36
DUST COLLECTORS

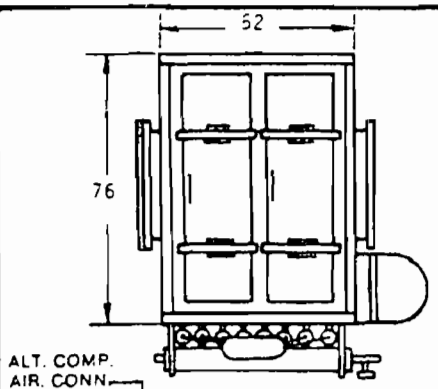
DWN V.S. 8.9.01.92	STYLE H
REV. B	DRWG NO. 3605

MODIFICATIONS:

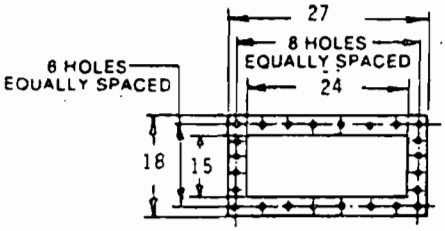
STAGE I

JOB NO.

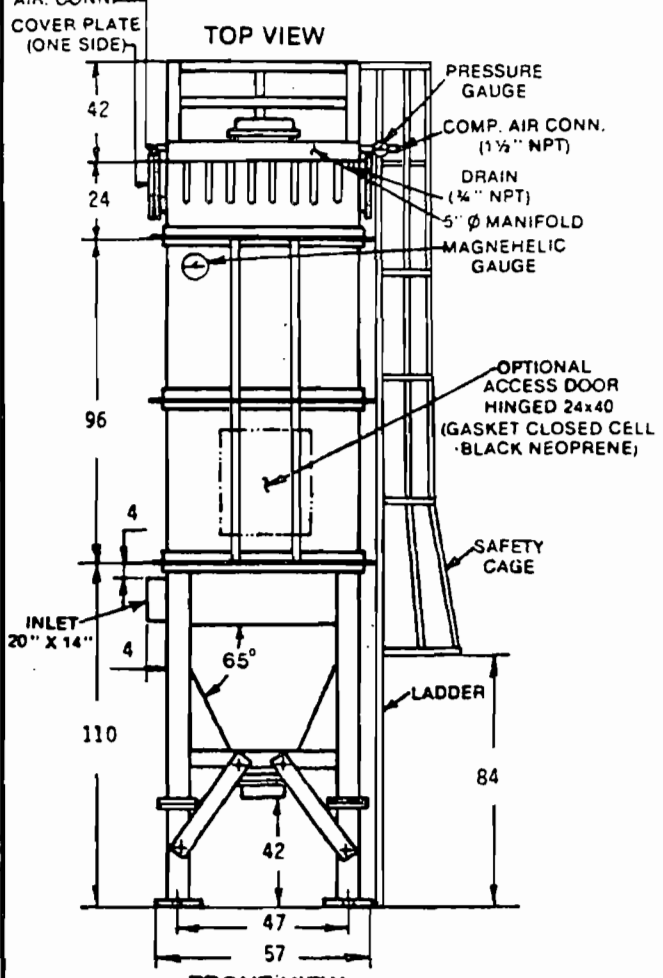
MODIFICATIONS



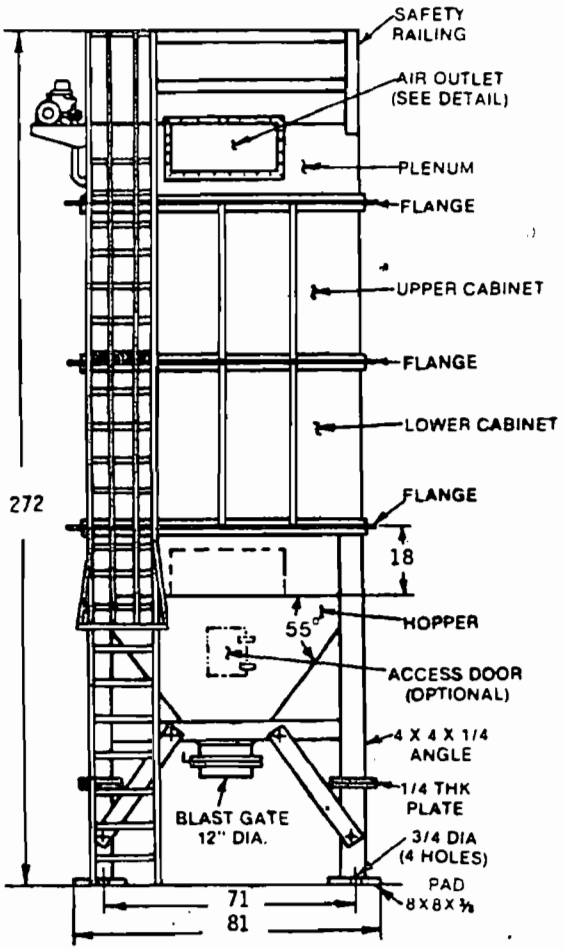
TOP VIEW



DETAIL
AIR OUTLET



FRONT VIEW



SIDE VIEW

SPECIFICATION

1. FILTER AREA:
   - MODEL TLS 808 ..... 870 SQ. FT.
   - MODEL TLD 808 ..... 1290 SQ. FT.
2. NO OF FILTER TUBES 80
3. FILTER TUBE DIM ..... 5" X 8'
4. FILTER MEDIA ..... 16 OZ. POLYESTER
5. HOPPER CAPACITY ..... 70 CU. FT.
6. REMOTE MOUNTED TIMER . NEMA 4 ENCL. 115 VAC, 60 HZ, 4 AMP MAX
7. VALVE ENCL ..... NEMA 4
8. COMPRESSED AIR REQ'D .. 90 - 100 PSI
9. AIR CONSUMPTION ..... 7 - 16 SCFM
10. HOUSING CONSTRUCTION . 14 GA MS
11. HOUSING RATING ..... ± 20" H_2O
12. PRIMED WITH RED OXIDE
13. SHIPPING WEIGHT ..... 2770 LBS.

THIS DRAWING NOT CERTIFIED FOR CONSTRUCTION UNLESS SIGNED BY STERNVENT ENG. DEPT.

CERT. BY _____ DATE _____

OPTIONS

1. BLOWER ASSEMBLY .....
2. SPECIAL FILTER MEDIA .....
3. EXPLOSION DISC OR DOOR .....
4. DRUM ASSEMBLY .....
5. 70° HOPPER .....
6. ROTARY AIRLOCK .....
7. HEAVIER GAUGE CONST. .....
8. HIGH TEMP. KIT .....
9. HOPPER ACCESS DOOR .....
10. CABINET ACCESS DOOR .....
11. GRAY OR SPEC. PAINT .....

MODEL CODE

MODEL # TL S 120 8
- JET PULSE SERIES
- FILTER TUBES
  - S = SINGLE WALL
  - D = DOUBLE WALL
- # OF FILTER TUBES
- LENGTH OF FILTER TUBES IN FT

NOTES

1. PLENUM & UPPER CABINET ARE FACTORY ASSEMBLED WITH MANIFOLD & VALVES. HOPPER, RAILING, LADDER, FILTER TUBES, CAGES, CLAMPS, PRESSURE GAUGE & TIMER TO BE FIELD INSTALLED.
2. AVAILABLE WITH 8', OR 10' LONG FILTER TUBES.

STERNVENT CO. INC.
BROOKLYN, N.Y. 11231

SPECIFICATION DRAWING
MODEL TLS 808 & TLD 808
JET PULSE COLLECTOR

DWN	TYPE H
REV	DRWG NO. 42100

STAGE II

MODEL 4
MAGNA/PACK

Application

The Farr Model 4 Universal Magna/Pack HEPA side access housing is used to accommodate Farr Magnamedia filters. Magnamedia filters are available in efficiency ranges of 95%, 99.97% and 99.99% (D.O.P.).

The Magna/Pack housing provides the highest degree of positive sealing integrity and should be employed in all applications where side access of HEPA filters is required.

The Magna/Pack housing is available in various sizes and capacities ranging from 1 high x 1 wide to 3 high x 5 wide units.

Design & Construction

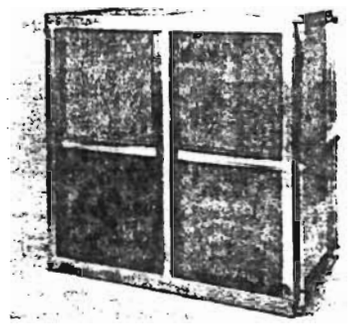
The Farr Magna/Pack was designed and constructed to provide the owner with the highest possible degree of positive sealing integrity. This is especially significant in the application of HEPA type filters.

The mounting and sealing principle utilized is that which is commonly employed on Laminar Flow Benches and Laminar Flow Wall Modules. Each filfer is individually mounted and sealed. The mounting surface is a heavy gage welded channel grid. The clamping mechanism consists of four (4) heavy duty swing bolts which are equipped with equi-bearing clamps and hex nuts. The Magna/Pack housing is designed to accommodate all standard 24" x 24" filters in either of two depths, 11½" or 5⅞".

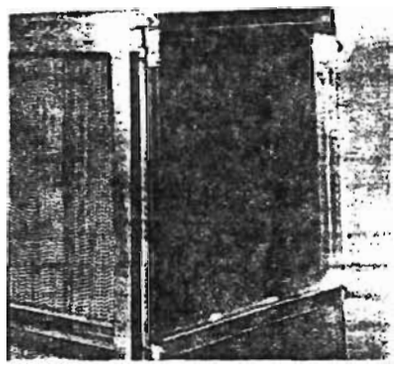
The housing is of welded construction, fabricated of 14 gage galvanized steel with reinforced bracing. It is supplied with doors on both sides to facilitate access for servicing. The depth of the housing and the swing bolt design provide access to other components of the air handling system. The doors are equipped with channel bracing and resilient neoprene gaskets. Heavy duty equi-bearing clamps are supplied to provide positive sealing

The Magna/Pack housing is constructed in such a manner that it will operate at 8" w.g. without occurrence of leakage between or around joints and mating surfaces.

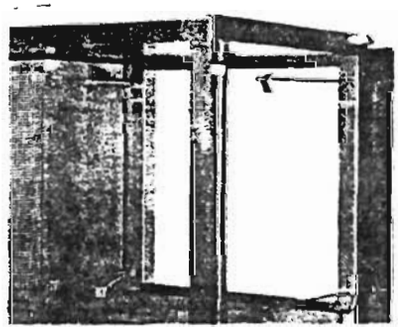
Details of Construction



Housing
14 gage galvanized steel with reinforced bracing.



Doors
14 gage galvanized steel with channel bracing and resilient neoprene gaskets.



Mounting Grid and Swing Bolts
Heavy gage welded channel grid. Four heavy duty swing bolts with equi-bearing clamps and hex nuts

Maintenance

The Farr Magna/Pack facilitates servicing of HEPA filters from either side of the unit. In order to remove and install filters, entry into the unit is required on units that are larger than two (2) filters wide. Entry into the unit provides for individual installation and sealing of each HEPA filter. Proper mounting torques should be effected. Due to simplicity of design and construction, the Magna/Pack does not require replacement or repair of components.

Installation

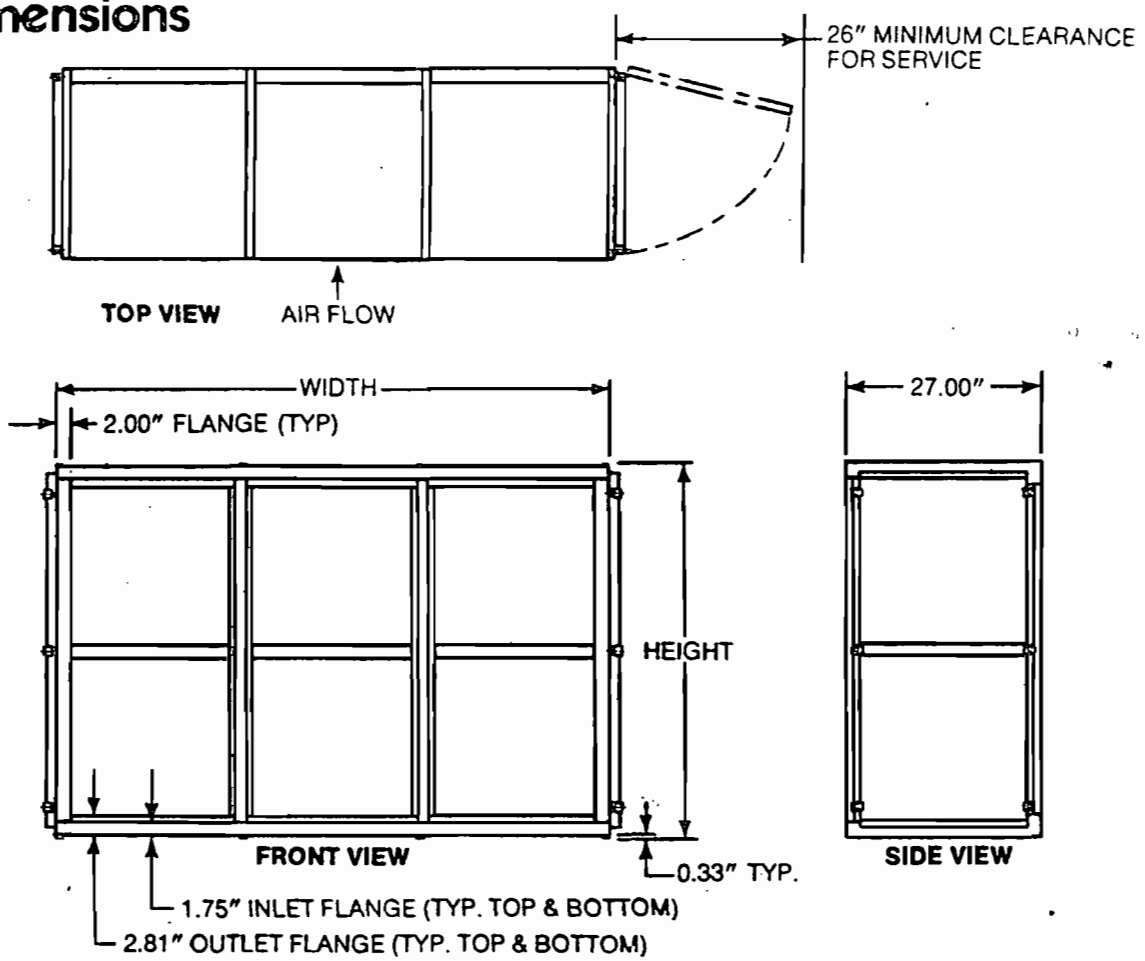
The Magna/Pack is completely factory assembled. It is equipped with standing flanges for ease of installation into duct work. Allow 26" minimum side clearance for removal of filters.

APPROXIMATE INSTALLED WEIGHT MAGNA/PACK — MODEL 4 (Less Filters)

Size	Approximate Weight
1 x 1	106
1 x 2	155
1 x 3	206
1 x 4	255
1 x 5	306
2 x 1	164
2 x 2	224
2 x 3	287
2 x 4	348
2 x 5	410
3 x 1	215
3 x 2	287
3 x 3	362
3 x 4	435
3 x 5	509

STAGE III

Dimensions



HEIGHT SIZES AVAILABLE			
NO. OF FILTERS	1	2	3
HEIGHT DIMENSION	28.50	52.50	76.50

WIDTH SIZES AVAILABLE					
NO. OF FILTERS	1	2	3	4	5
WIDTH DIMENSION	26.38	52.00	77.63	103.25	128.88

How to Order

Specify model, depth of filter, number of filters high and number of filters wide. Filters are not included, order separately, stating quantities, type and size, order with gaskets on the downstream face.

EXAMPLE:

FARR MAGNA/PACK MODEL 4-12 SIZE 2 x 4

- Number of filters wide
- Number of filters high
- Filter depth
- Model of Magna/Pack

FARR

FARR COMPANY
P.O. Box 92187
Los Angeles, CA 90009
(213) 772-5221

In Canada:
FARR COMPANY LTD.
Montreal

In Europe:

(5) Environmental Manager:

(6) Telephone No.:

(7) Emissions*:

Contaminant	Rate or Concentration

(8) Process Rate*:

10. Reason for selection and description of systems:

The combination cyclone/baghouse/HEPA filters is recognized by industry as an acceptable and efficient solution for the removal of particulates in exhaust systems. The cyclone baghouse combination acts as an efficient PRC filter whereby 99.6% by weight are removed. The exhaust stream then flows through a series of 4 HEPA filters which trap and remove 99.97% particles .3 microns and larger.

*Applicant must provide this information when available. Should this information not be available, applicant must state the reason(s) why.

P 085 152 654

RECEIPT FOR CERTIFIED MAIL

NO INSURANCE COVERAGE PROVIDED
NOT FOR INTERNATIONAL MAIL

(See Reverse)

Sent to Mr. Richard C. Winfield	
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 9/16/85	

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. Richard C. Winfield
Martin Marietta Aerospace
P. O. Box 5837
Orlando, FL 32855

4. Type of Service:	Article Number
☐ Registered ☐ Insured XX Certified ☐ COD ☐ Express Mail	P 085 152 654

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)*

ORLANDO, FL ORANGE BLOSSOM STA. SEP 17 1985

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

September 13, 1985

Mr. Richard C. Winfield
Director of Facilities
Martin Marietta .erospace
P. O. Box 5837 (MP-124)
Orlando, Florida 32855

Dear Mr. Winfield:

Re: Application Numbers AC 48-84650 through AC 48-84653 and AC 48-85886 (Wet Fumes Scrubbers S-1, S-2, S-3, S-4) and (Dust Collector Unit No. 6)

On April 20, 1984, an incompleteness letter was sent to you requesting additional information concerning the above mentioned applications. Then, a follow up letter was sent on April 19, 1985. Since that time no response has been received by this office.

If the project has been cancelled, the Bureau requests that a letter withdrawing the permit application be submitted. If the project is still to be completed, please submit the information requested in our letter of April 20, 1984. Sufficient time has elapsed for a response and the Bureau has the option to deny the permits.

If you have any questions, please contact Teresa M. Heron of my staff at (904)488-1344.

Sincerely,

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

CHF/TH/s

cc: C. Collins

No. 0155547

RECEIPT FOR CERTIFIED MAIL

**NO INSURANCE COVERAGE PROVIDED—
NOT FOR INTERNATIONAL MAIL**

(See Reverse)

SENT TO Mr. Richard C. Winfiel				
STREET AND NO.				
P.O., STATE AND ZIP CODE				
POSTAGE				$
CONSULT POSTMASTER FOR FEES	CERTIFIED FEE			¢
	OPTIONAL SERVICES	SPECIAL DELIVERY		¢
		RESTRICTED DELIVERY		¢
		RETURN RECEIPT SERVICE	SHOW TO WHOM AND DATE DELIVERED	¢
			SHOW TO WHOM, DATE, AND ADDRESS OF DELIVERY	¢
			SHOW TO WHOM AND DATE DELIVERED WITH RESTRICTED DELIVERY	¢
			SHOW TO WHOM, DATE AND ADDRESS OF DELIVERY WITH RESTRICTED DELIVERY	¢
TOTAL POSTAGE AND FEES				$
POSTMARK OR DATE 4/19/85				

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. Richard C. Winfield
Martin Marietta Aerospace
P. O. Box 5837 (MP-124)
Orlando, Florida 32855

4. Type of Service:	Article Number
☐ Registered ☐ Insured ☒ Certified ☐ COD ☐ Express Mail	0155547

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)*

ORLANDO FL ORANGE BLOSSOM STA. APR 1985 USPS

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

April 18, 1985

Mr. Richard C. Winfield
Director of Facilities
Martin Marietta Aerospace
P.O. Box 5837 (MP-124)
Orlando, Florida 32855

Dear Mr. Winfield:

Re: Application Numbers AC 48-84650 through AC 48-84653 and AC 48-85086 (Wet Fumes Scrubbers S-1, S-2, S-3, S-4) and (Dust Collector Unit No. 6)

An incompleteness letter concerning the subject permit applications was sent to your company on April 20, 1984. As of this date, we have not received a response.

The bureau would appreciate an update on the status of these permit applications.

If you have any questions, please call Teresa M. Heron at (904)488-1344, or write to me at the above address.

Sincerely,

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

CHF/TH/rw

cc: Chuck Collins

No. 0157495

RECEIPT FOR CERTIFIED MAIL

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

SENT TO
Mr. Richard C. Winfield

STREET AND NO.

P.O., STATE AND ZIP CODE

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

POSTMARK OR DATE

4/20/84

PS Form 3800, Apr. 1976

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

April 20, 1984

CERTIFIED MAIL - RECEIPT REQUESTED

Mr. Richard C. Winfield
Director of Facilities
Martin Marietta Aerospace
P. O. Box 5837 (MP-124)
Orlando, Florida 32855

Re: Application Numbers AC 48-84650 through AC 48-84653 and AC 48-85086 (Wet Fumes Scrubbers S-1, S-2, S-3, S-4) and (Dust Collector Unit No. 6)

Dear Mr. Winfield:

The Bureau of Air Quality Management has received your applications for permits to construct wet fume scrubber systems and dust collector at your facility.

From the initial review of your proposal, it was determined that additional information is needed before we can process the applications. Please submit information on the following items:

Refer to DER form 17-1.122(16), Application to Operate/Construct Air Pollution Sources.

SECTION II.

General Project Information

Is your facility, Martin Marietta Corporation, a major emitting facility? (See Florida Administrative Code, Rule 17-2.100(62) and 17.2.100(95) for applicable definitions).

Are the potential emissions of any criteria pollutants from any equipment operation or chemical process at this facility over 250 tons per year?

Please send a list of the operating permits that will show allowable and actual emissions of criteria and non criteria pollutants from each source at this facility. This list should

include a material balance showing the quantity of pollutant escaping from the process equipment, the amount removed by the control equipment, and emissions to the atmosphere.

On page 2 of the application for the Wet Fume Scrubber S-3, "F" Line, you indicated operating permits for tanks F-61 and F-68 will expire 5/4/87. Why does this new application also cover tank F-61 (Hydrochloric Acid) and F-68 (Golden Iridite). Please explain this inconsistency.

Process Description

Please submit a general description of the process.

Are there any pollutant emissions from the primary cleaning processes? If so, please quantify these emissions.

What are the dimensions of the plating tanks?

How many amperes per square foot (current density) does this plating process require?

What are the hooding and ventilating design specifications (slot and plenum velocity, hoods lengths, etc)?

What are the scrubber water circulation and recirculation rates?

How is the air pollution control system protected from corrosion?

Are any mist inhibitors used in these processes?

SECTION III. SECTION V.

Airborne Contaminants Emitted

Please attach basis of engineer's estimates of the emission rates proposed (e.g. control device guarantee, AP-42 emission factors, etc).

What is the maximum concentration of the pollutants (mg/m^3) from this process in the work room atmosphere?

Re: AC 48-85056 (Dust Collector System No. 6)

Please submit a general description of the operation controlled by the proposed dust collector and the design specifications of this control system.

Please attach basis of emission rate proposed.

As soon as the requested information is received at this office, we will resume processing your applications.

If you have any questions on this request please call Teresa M. Heron of this office at (904)488-1344 or write to me to the above address.

Sincerely,

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

CHF/TH/s

MARTIN MARIETTA AEROSPACE

POST OFFICE BOX 5837
ORLANDO, FLORIDA 32855

22 March 1984

Alex Alexander, P.E.
District Manager
St. Johns River District
3319 Maguire Boulevard
Orlando, Florida 32803

Dear Mr. Alexander:

Enclosed are four (4) permit applications to construct air pollution sources at Martin Marietta's Sand Lake Road Center site and a company check for the permit fees.

Sincerely,

MARTIN MARIETTA CORPORATION

R. F. Green

Raymond F. Green, P. E.
Staff Engineer

RFG:il

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: _____	

ST. JOHNS RIVER DISTRICT

TO: Bill Thomas OSJ-AP-84-0061

FROM: C. Collins CMC

DATE: March 28, 1984

SUBJECT: Modification to existing major facility
Martin Marietta Aerospace (Orange County)

DER
APR 02 1984
BAQM

Enclosed are four (4) applications to construct air pollution sources. This facility currently has the potential to emit over 100 tons/year and was submitted to our office in error.

We have retained one (1) copy of each application for our files.

CMC:RC
rce

Enclosures

STATE OF FLORIDA
DEPARTMENT OF ENVIRONMENTAL REGULATION

No 80629

RECEIPT FOR APPLICATION FEES AND MISCELLANEOUS REVENUE

Received from Martin Marietta Date March 23, 1984

Address P.O. Box 5837, Orlando Dollars $ 400 00

Applicant Name & Address _____

Source of Revenue None S-1 to S-4

Revenue Code 001001 Ck # 66204 Application Number AC48-84650; AC48-84651
AC48-84652 AC48-84653

By _____

AC 48-84650

DER

APR 02 19

PAID
100
MAR 23 1984
SAINT JOHNS
RIVER DISTRICT

RECEIVED
MAR 1984
Saint Johns River District

STATE OF FLORIDA
DEPARTMENT OF ENVIRONMENTAL REGULATION

APPLICATION TO OPERATE/CONSTRUCT AIR POLLUTION SOURCES

SOURCE TYPE: Minor [XX] New[1] [ ] Existing[1]

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

COMPANY NAME: Martin Marietta Aerospace COUNTY: Orange

Identify the specific emission point source(s) addressed in this application (i.e. Lime Kiln No. 4 with Venturi Scrubber; Peeking Unit No. 2, Gas Fired) Wet Fume Scrubber S-1, "B" Line

SOURCE LOCATION: Street 4600 Sand Lake Road City Orlando

UTM: East 454.854 M North 3,146,098 M

Latitude 28 ° 26 ' 32 "N Longitude 81 ° 27 ' 39 "W

APPLICANT NAME AND TITLE: Richard C. Winfield, Director of Facilities

APPLICANT ADDRESS: P. O. Box 5837 (MP-124), Orlando, FL 32855

SECTION I: STATEMENTS BY APPLICANT AND ENGINEER

A. APPLICANT

I am the undersigned owner or authorized representative* of Martin Marietta Aerospace

I certify that the statements made in this application for a Construction 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: Richard C Winfield

Richard C. Winfield, Director of Facilities
Name and Title (Please Type)

Date: 3/6/84 Telephone No. 305/356-3234

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 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.

RAYMOND F. GREEN CERTIFICATE 9716 STATE OF FLORIDA REGISTERED ENGINEER
(Affix Seal)

Signed: Raymond F. Green

Raymond F. Green
Name (Please Type)

Martin Marietta Aerospace
Company Name (Please Type)

P.O. Box 5837 (MP-124) Orlando, FL 32855
Mailing Address (Please Type)

Florida Registration No. 9716 Date: 3/8/84 Telephone No. 305/356-4286

[1]See Section 17-2.02(15) and (22), Florida Administrative Code, (F.A.C.)

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.

Installation of a wet fume scrubber, Harrison, model HF-140 or equivalent, 14,000 CFM, single packed tower, to exhaust and scrub the fumes from a series of plating tank manifolded to a common exhaust system. Completed installation will be in compliance with existing regulations.

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

Start of Construction 6/25/84 Completion of Construction 8/27/84

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.)

Installation of Wet Fume Scrubber $40,000

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

None

E. Is this application associated with or part of a Development of Regional Impact (DRI) pursuant to Chapter 380, Florida Statutes, and Chapter 22F-2, Florida Administrative Code? X Yes ____ No

F. Normal equipment operating time: hrs/day 8 ; days/wk 5 ; wks/yr 52 ; if power plant, hrs/yr ____ ;

if seasonal, describe: ____

G. 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? n/a
   c. If yes, list non-attainment pollutants.
      ozone
2. Does best available control technology (BACT) apply to this source? If yes, see Section VI. yes
3. Does the State "Prevention of Significant Deterioriation" (PSD) requirements 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

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		
Turco Aviation	Alkaline Cleaner	1%	N/A	Tank B-2
Aluminetch #2	Alkaline Cleaner	4%	N/A	Tank B-5

B. Process Rate, if applicable: (See Section V, Item 1) Not Applicable. Emissions are based on evaporated rate/surface area of tank.

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

2. Product Weight (lbs/hr): _____

C. Airborne Contaminants Emitted: Mixture of soluble chemicals from Plating Shop collected by the exhaust system.

Name of Contaminant	Emission[1]		Allowed Emission[2] Rate per Ch. 17-2, F.A.C.	Allowable[3] Emission lbs/hr	Potential Emission[4]		Relate to Flow Diagram
	Maximum lbs/hr	Actual T/yr			lbs/hr	T/yr	
Alkaline Cleaner	0.07	T/yr	N/A	N/A	1.38	T/yr	B-2,5
(as Na)							

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

Name and Type (Model & Serial No.)	Contaminant	Efficiency	Range of Particles[5] Size Collected (in microns)	Basis for Efficiency (Sec. V, It[5])
Harrison #HF-140	Alkaline Cleaner	95%	N/A	Mfg. Data

[1]See Section V, Item 2.

[2]Reference applicable emission standards and units (e.g., Section 17-2.05(6) Table II, E. (1), F.A.C. – 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)

[5]If Applicable

E. Fuels NOT APPLICABLE.

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

*Units Natural Gas, MMCF/hr; Fuel Oils, barrels/hr; Coal, 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.

No solid waste generated. Water from scrubber discharged to Martin Marietta's Industrial Treatment Plant.

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

Stack Height: (above ground) 25.9 ft. Stack Diameter: 31 1/2" x 23 3/4" ft.

Gas Flow Rate: 14,000 ACFM Gas Exit Temperature: ambient °F.

Water Vapor Content: 100% RH % Velocity: 46.67 FPS

SECTION IV: INCINERATOR INFORMATION

NOT APPLICABLE

Type of Waste	Type O (Plastics)	Type I (Rubbish)	Type II (Refuse)	Type III (Garbage)	Type IV (Pathological)	Type V (Liq & Gas By-prod.)	Type VI (Solid By-prod.)
Lbs/hr Incinerated							

Description of Waste _____

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

Approximate Number of Hours of Operation per day _____ days/week _____

Manufacturer _____

Date Constructed _____ Model No. _____

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

Stack Height: _____ ft. Stack Diameter _____ Stack Temp. _____

Gas 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.):

SECTION V: SUPPLEMENTAL REQUIREMENTS

Please provide the following supplements where required for this application.

1. Total process input rate and product weight – show derivation. NOT APPLICABLE.

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). ENGINEER'S ESTIMATE OF SYSTEM WITHOUT CONTROLS.

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, etc.). SEE ATTACHED DRAWINGS.

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). BASED ON MANUFACTURER'S DATA.

6. An 8½" 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. SEE SKETCH NO. 1.

7. An 8½" 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). SEE SKETCH NO. 2.

8. An 8½" x 11" plot plan of facility showing the location of manufacturing processes and outlets for airborne emissions. Relate all flows to the flow diagram. SEE SKETCH NO. 3.

9. An application fee of $20, unless exempted by Section 17-4.05(3), F.A.C. 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 [X] No

Contaminant	Rate or Concentration

B. Has EPA declared the best available control technology for this class of sources (If yes, attach copy) [ ] Yes [X] No

Contaminant	Rate or Concentration

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

Contaminant	Rate or Concentration
Alkaline Cleaners	95% Removal Eff (0.14 T/yr.)

D. Describe the existing control and treatment technology (if any). NONE

1. Control Device/System:
2. Operating Principles:
3. Efficiency:*
4. Capital Costs:
5. Useful Life:
6. Operating Costs:
7. Energy:
8. Maintenance Cost:
9. Emissions:

Contaminant	Rate or Concentration

*Explain method of determining D 3 above.

10. Stack Parameters

a. Height: ft. b. Diameter: ft.

c. Flow Rate: ACFM d. Temperature: °F

e. Velocity: FPS

E. Describe the control and treatment technology available (As many types as applicable, use additional pages if necessary).

1.

a. Control Device: Packed tower, wet fume scrubber

b. Operating Principles: Decrease velocity of exhaust gas and then scrub contaminants by passing through 2 scrubbing stages.

c. Efficiency*: Alkaline Cleaners 95% d. Capital Cost: $40,000

e. Useful Life: 10 yrs. f. Operating Cost: $13,000/yr.

g. Energy*: 25 KWH h. Maintenance Cost: $4,000/yr.

i. Availability of construction materials and process chemicals:
Readily available.

j. Applicability to manufacturing processes: Easily adapted to plating line, causing limited interference with process.

k. Ability to construct with control device, install in available space, and operate within proposed levels:
Presents no known problems.

2.

a. Control Device:

b. Operating Principles:

c. Efficiency*: d. Capital Cost:

e. Useful Life: f. Operating Cost:

g. Energy**: h. Maintenance Costs:

i. Availability of construction materials and process chemicals:

j. Applicability to manufacturing processes:

k. Ability to construct with control device, install in available space, and operate within proposed levels:

*Explain method of determining efficiency. Manufacturer's Data

**Energy to be reported in units of electrical power – KWH design rate.

3.

a. Control Device:

b. Operating Principles:

c. Efficiency*: d. Capital Cost:

e. Life: f. Operating Cost:

g. Energy: h. Maintenance Cost:

*Explain method of determining efficiency above.

i. Availability of construction materials and process chemicals:

j. Applicability to manufacturing processes:

k. Ability to construct with control device, install in available space and operate within proposed levels:

4.

a. Control Device

b. Operating Principles:

c. Efficiency*:

d. Capital Cost:

e. Life:

f. Operating Cost:

g. Energy:

h. Maintenance Cost:

i. Availability of construction materials and process chemicals:

j. Applicability to manufacturing processes:

k. Ability to construct with control device, install in available space, and operate within proposed levels:

F. Describe the control technology selected:

1. Control Device: Packed tower, wet fume scrubber.
2. Efficiency*: Alkaline Cleaners 95%
3. Capital Cost: $40,000
4. Life: 10 yrs.
5. Operating Cost: $13,000/yr.
6. Energy: 25 KH
7. Maintenance Cost: $4,000/yr.
8. Manufacturer: Harrison
9. Other locations where employed on similar processes:

a.

(1) Company: Martin Marietta Aerospace

(2) Mailing Address: P. O. Box 5837 (MP-124)

(3) City: Orlando (4) State: Florida

(5) Environmental Manager: Ray Green

(6) Telephone No.: 305/356-4286

*Explain method of determining efficiency above. Manufacturers Data

(7) Emissions*:

Contaminant	Rate or Concentration
Alkaline Cleaners as Na	0.07 lbs/hr.

(8) Process Rate*: Not applicable.

b.

(1) Company:

(2) Mailing Address:

(3) City: (4) State:

*Applicant must provide this information when available. Should this information not be available, applicant must state the reason(s) why.

(5) Environmental Manager:

(6) Telephone No.:

(7) Emissions*:

Contaminant	Rate or Concentration

(8) Process Rate*:

10. Reason for selection and description of systems:

A packed tower, wet fume scrubber is recognized by industry as an acceptable and efficient solution for the removal of contaminants in exhaust systems. In this system, contaminant removal is accomplished by first slowing the fumes to a velocity below 500 fpm and then passing the fumes through two scrubbing stages. The fumes first pass through a water spray or curtain during which a percentage of the larger contaminant particles drop out and the remaining fumes are saturated. The second stage consists of a deep pack of polypropylene, high surface, non-clogging, spherical plate packing media which is continuously wetted by the spray nozzles. The saturated fumes are impinged upon the packing and the contaminants are absorbed and carried away in the wash water.

*Applicant must provide this information when available. Should this information not be available, applicant must state the reason(s) why.

SECTION VII – PREVENTION OF SIGNIFICANT DETERIORATION

NOT APPLICABLE

A. Company Monitored Data

1. _____ no sites _____ TSP _____ ( ) SO^2* _____ Wind spd/dir

Period of monitoring _____/_____/_____ to _____/_____/_____
month day year month day year

Other data recorded _____

Attach all data or statistical summaries to this application.

2. Instrumentation, Field and Laboratory

a) Was instrumentation EPA *referenced* or its *equivalent*? _____ Yes _____ No

b) Was instrumentation calibrated in accordance with Department procedures? _____ Yes _____ No _____ Unknown

B. Meteorological Data Used for Air Quality Modeling

1. _____ Year(s) of data from _____/_____/_____ to _____/_____/_____
month day year month day year

2. Surface data obtained from (location) _____

3. Upper air (mixing height) data obtained from (location) _____

4. Stability wind rose (STAR) data obtained from (location) _____

C. Computer Models Used

1. _____ Modified? If yes, attach description.

2. _____ Modified? If yes, attach description.

3. _____ Modified? If yes, attach description.

4. _____ Modified? If yes, attach description.

Attach copies of all final model runs showing input data, receptor locations, and principle output tables.

D. Applicants Maximum Allowable Emission Data

Pollutant	Emission Rate
TSP	_____ grams/sec
SO^2	_____ grams/sec

E. Emission Data Used in Modeling

Attach list of emission sources. Emission data required is source name, description on point source (on NEDS point number), UTM coordinates, stack data, allowable emissions, and normal operating time.

F. Attach all other information supportive to the PSD review.

*Specify bubbler (B) or continuous (C).

G. Discuss the social and economic impact of the selected technology versus other applicable technologies (i.e., jobs, payroll, production, taxes, energy, etc.). Include assessment of the environmental impact of the sources.

H. Attach scientific, engineering, and technical material, reports, publications, journals, and other competent relevant information describing the theory and application of the requested best available control technology.

MARTIN MARIETTA AEROSPACE

ORLANDO AEROSPACE
POST OFFICE BOX 5837
ORLANDO, FLORIDA 32855
TELEPHONE (305) 352-5788

WALTER O. LOWRIE
PRESIDENT

5 January 1983

Mr. Alex Senkevich
District Manager
State of Florida, Department
of Environmental Regulation
St. Johns River District
3319 Maguire Boulevard
Orlando, Florida 32803

Dear Mr. Senkevich:

This letter is to certify that Richard C. Winfield, Director of Facilities, is the authorized Pollution Control Representative for Martin Marietta Orlando Aerospace. As Pollution Control Representative, Mr. Winfield is authorized to execute all environmental permit applications required by Chapter 403 of the Florida Statutes on behalf of the Corporation.

Very truly yours,

Walter O. Lowrie

Walter O. Lowrie
President

WOL/jc

State of Florida

Department of State

I certify from the records of this office that MARTIN-MARIETTA CORPORATION, a Maryland corporation, is authorized to transact business within the State of Florida, qualified on October 13, 1961.

The charter number for this corporation is 815678.

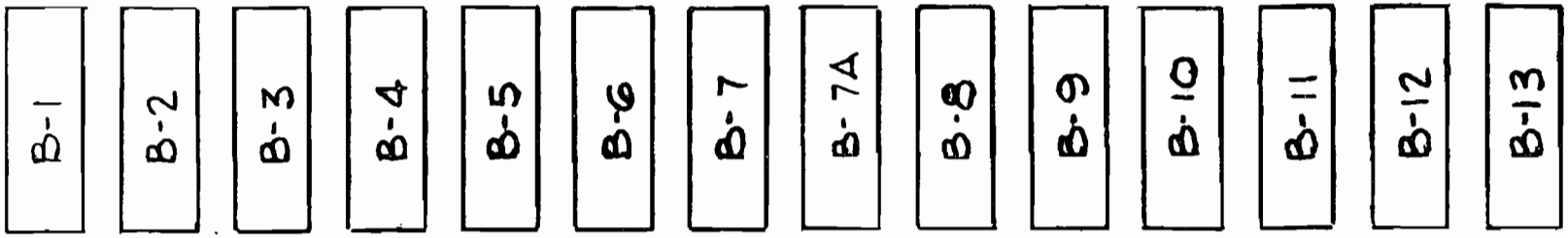
I further certify that said corporation has filed all annual reports and paid all annual report filing fees due this office through December 31, 1983, and its status is active.

Given under my hand and the Great Seal of the State of Florida, at Tallahassee, the Capital, this the 8th day of February, 1984.

George Firestone
Secretary of State

CER-101

Form No. D 512-A Sep 79

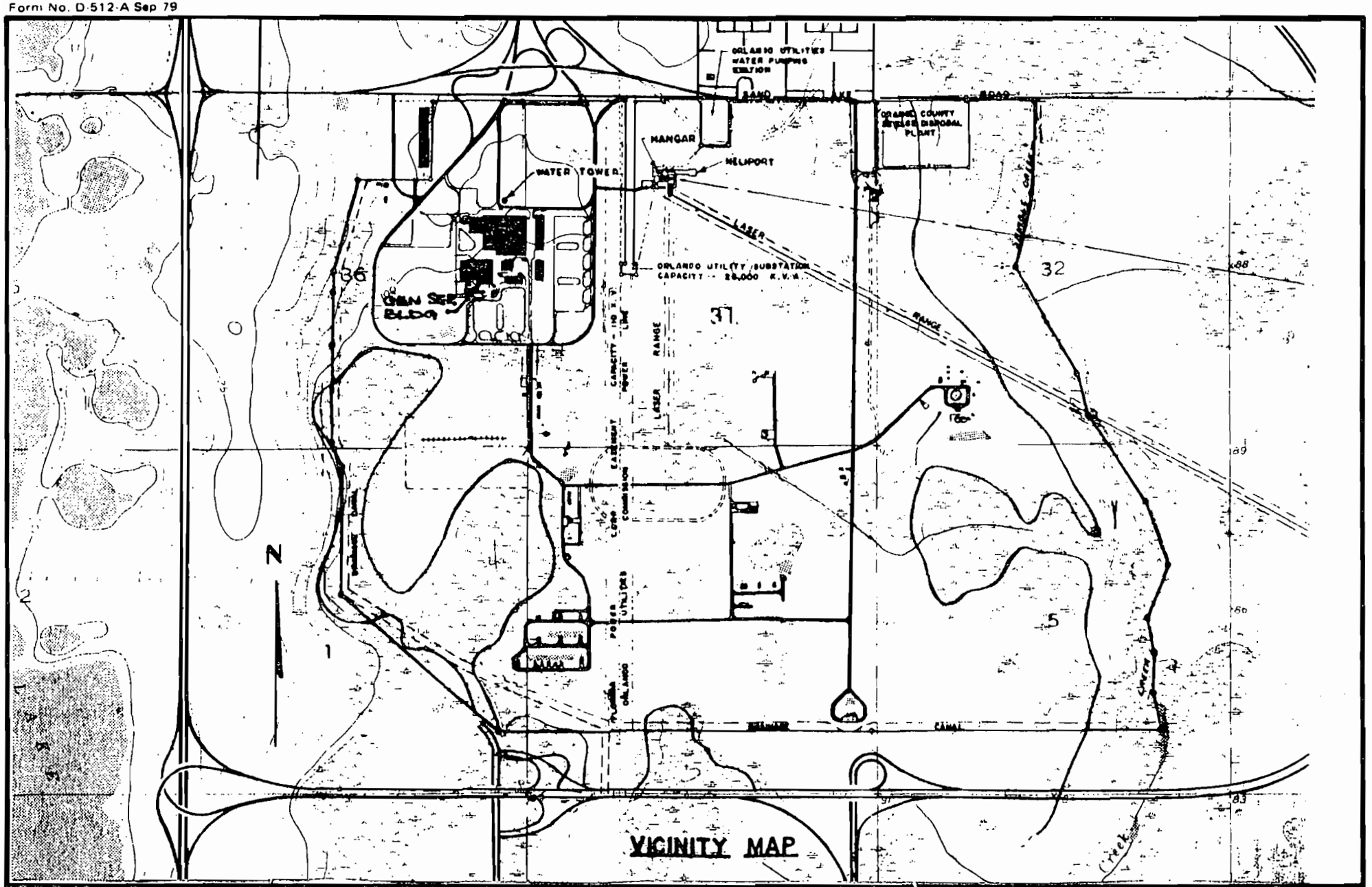


"B" LINE PLATING TANKS

1. DEGREASER
2. TURCO AVIATION
3. WARM RINSE
4. SPRAY RINSE
5. ALUMIN ETCH #2
6. COLD RINSE
7. DIVERSEY #514
8. COLD RINSE
9. CHROMIC ANODIZE
10. ANODIC SEAL
11. CHEM-RITE A22
12. CHEM-RITE A22
13. COLD RINSE
14. HOT RINSE

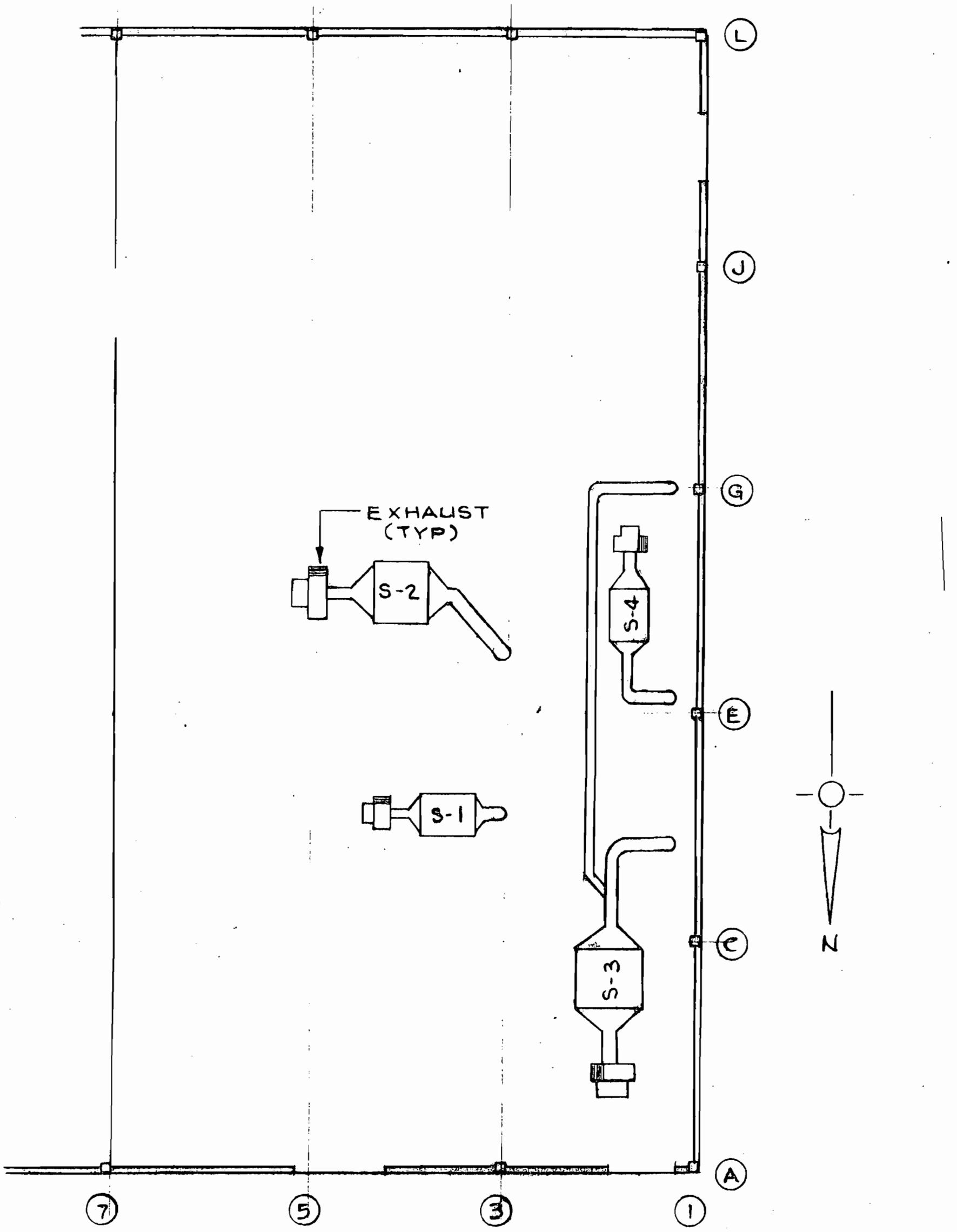
SIZE	WORK SHEET – SKETCH	TITLE:	FACILITIES ENGINEERING
A	DESIGNED BY / DRAWN BY	"B" LINE OPERATIONS	MARTIN MARIETTA AEROSPACE ORLANDO DIVISION
	SKETCH NO. 1		

Form No. D-512-A Sep 79



SIZE	WORK SHEET – SKETCH	TITLE:	FACILITIES ENGINEERING
A	DESIGNED BY / DRAWN BY	MARTIN MARIETTA SITE PLAN	MARTIN MARIETTA AEROSPACE ORLANDO DIVISION
	SKETCH NO. 2		

Form No. D-612-B Sep 79



SIZE	WORK SHEET – SKETCH	TITLE:	
B	DESIGNED BY / DRAWN BY	ROOF PLAN	FACILITIES ENGINEERING
	SKETCH NO. 3	GENERAL SERVICE BLDG.	MARTIN MARIETTA AEROSPACE ORLANDO DIVISION

AC 44-84651

PAID
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MAR 23 1984
SAINT JOHNS
RIVER DISTRICT

DER
APR 02 1984
BAQM

RECEIVED
MAR 1984
Saint Johns River
District

STATE OF FLORIDA
DEPARTMENT OF ENVIRONMENTAL REGULATION

APPLICATION TO OPERATE/CONSTRUCT AIR POLLUTION SOURCES

SOURCE TYPE: Minor [x] New[1] [ ] Existing[1]

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

COMPANY NAME: Martin Marietta Aerospace COUNTY: Orange

Identify the specific emission point source(s) addressed in this application (i.e. Lime Kiln No. 4 with Venturi Scrubber; Peeking Unit No. 2, Gas Fired) Wet Fume Scrubber S-2, "B" Line

SOURCE LOCATION: Street Sand Lake Road City Orlando

UTM: East 454,854 M North 3,146,098 M

Latitude 28 ° 26 ' 32 "N Longitude 81 ° 27 ' 39 "W

APPLICANT NAME AND TITLE: Richard C. Winfield, Director of Facilities

APPLICANT ADDRESS: P. O. Box 5837 (MP-124), Orlando, FL 32855

SECTION I: STATEMENTS BY APPLICANT AND ENGINEER

A. APPLICANT

I am the undersigned owner or authorized representative* of Martin Marietta Aerospace

I certify that the statements made in this application for a Construction 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: Richard C. Winfield

Richard C. Winfield, Director of Facilities
Name and Title (Please Type)

Date: 3/6/84 Telephone No. 305/356-3234

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 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.

RAYMOND F. GREEN
CERTIFICATE NO.
9716
STATE OF
FLORIDA
REGISTERED ENGINEER
(Affix Seal)

Signed: Raymond F. Green

Raymond F. Green
Name (Please Type)

Martin Marietta Aerospace
Company Name (Please Type)

P.O. Box 5837, (MP-124), Orlando, FL
Mailing Address (Please Type)

Florida Registration No. 9716 Date: 3/8/84 Telephone No. 305/356-4286

[1]See Section 17-2.02(15) and (22), Florida Administrative Code, (F.A.C.)

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.

Installation of a wet fume scrubber, Harrison, model HF-225 or equivalent, 25,475 CFM, double packed tower, to exhaust and scrub the fumes from a series of plating tanks manifolded to a common exhaust system. Completed installation will be in compliance with existing regulations.

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

Start of Construction 6/25/84 Completion of Construction 8/27/84

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.)

Installation (including equipment) $60,000.

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

N/A

E. Is this application associated with or part of a Development of Regional Impact (DRI) pursuant to Chapter 380, Florida Statutes, and Chapter 22F-2, Florida Administrative Code? X Yes ____ No

F. Normal equipment operating time: hrs/day 8 ; days/wk 5 ; wks/yr 52 ; if power plant, hrs/yr ____ ;

if seasonal, describe: ____

G. 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? n/a
   c. If yes, list non-attainment pollutants.
      ozone
2. Does best availeble control technology (BACT) apply to this source? If yes, see Section VI. yes
3. Does the State "Prevention of Significant Deterioriation" (PSD) requirements 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

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		
Diversey #514	acid(as Cr)	.1%	N/A	Tank B-7
Chromic Anodize	acid(as Cr)	4.5%	N/A	Tank B-8
Sodium Dichromate	(as Cr)	2.0%	N/A	Tank B-9

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

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

2. Product Weight (lbs/hr): _____

C. Airborne Contaminants Emitted:

Name of Contaminant	Emission[1]		Allowed Emission[2] Rate per Ch. 17-2, F.A.C.	Allowable[3] Emission lbs/hr	Potential Emission[4]		Relate to Flow Diagram
	Maximum lbs/hr	Actual T/yr			lbs/hr	T/yr	
$Cr O_3$ (as Cr)	*N/S	T/yr	N/A	N/A	0.0003	T/yr	B-7
$Cr O_3$ (as Cr)	0.03	T/yr	N/A	N/A	0.71	T/yr	B-8
$Na_2Cr_2O_2$(as Cr)	0.22	T/yr	N/A	N/A	5.58	T/yr	B-9

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

Name and Type (Model & Serial No.)	Contaminant	Efficiency	Range of Particles[5] Size Collected (in microns)	Basis for Efficiency (Sec. V, It[5])
Harrison/HF-225	acids	96%	N/A	Mfg. Data

[1]See Section V, Item 2.

[2]Reference applicable emission standards and units (e.g., Section 17-2.05(6) Table II, E. (1), F.A.C. – 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)

[5]If Applicable

*NOT SIGNIFICANT

E. Fuels NOT APPLICABLE.

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

*Units Natural Gas, MMCF/hr; Fuel Oils, barrels/hr; Coal, 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 N/A Maximum _____

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

No solid waste generated. Water from scrubber discharged to Martin Marietta's Industrial Treatment Plan.

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

Stack Height: 29.8' above ground surface ft. Stack Diameter: 42" x 32" ft.

Gas Flow Rate: 25,475 ACFM Gas Exit Temperature: ambient °F.

Water Vapor Content: 100% RH % Velocity: 56.6 FPS

SECTION IV: INCINERATOR INFORMATION

NOT APPLICABLE

Type of Waste	Type O (Plastics)	Type I (Rubbish)	Type II (Refuse)	Type III (Garbage)	Type IV (Pathological)	Type V (Liq & Gas By-prod.)	Type VI (Solid By-prod.)
Lbs/hr Incinerated							

Description of Waste _____

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

Approximate Number of Hours of Operation per day _____ days/week _____

Manufacturer _____

Date Constructed _____ Model No. _____

	Volume $(ft)^3$	Heat Release (BTU/hr)	Fuel		Temperature (^oF)
			Type	BTU/hr	
Primary Chamber					
Secondary Chamber					

Stack Height: _____ ft. Stack Diameter _____ Stack Temp. _____

Gas 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.):

SECTION V: SUPPLEMENTAL REQUIREMENTS

Please provide the following supplements where required for this application.

1. Total process input rate and product weight – show derivation. NOT APPLICABLE.
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). ENGINEER'S ESTIMATE OF SYSTEM WITHOUT CONTROLS.
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, etc.). SEE ATTACHED DRAWINGS.
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). BASED ON MANUFACTURER'S DATA.
6. An 8½" 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. SEE SKETCH NO. 1-A.
7. An 8½" 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). SEE SKETCH NO. 2.
8. An 8½" x 11" plot plan of facility showing the location of manufacturing processes and outlets for airborne emissions. Relate all flows to the flow diagram. SEE SKETCH NO. 3.

9. An application fee of $20, unless exempted by Section 17-4.05(3), F.A.C. 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 [X] 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
Chromic Acid	96% Removal Eff
Sodium Dichromate	96% Removal Eff

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

1. Control Device/System:
2. Operating Principles:
3. Efficiency:*
4. Capital Costs:
5. Useful Life:
6. Operating Costs:
7. Energy:
8. Maintenance Cost:
9. Emissions:

Contaminant	Rate or Concentration

*Explain method of determining D 3 above.

10. Stack Parameters

a. Height: ft. b. Diameter: ft.

c. Flow Rate: ACFM d. Temperature: °F

e. Velocity: FPS

E. Describe the control and treatment technology available (As many types as applicable, use additional pages if necessary).

1.

a. Control Device: Packed tower, wet fume scrubber

b. Operating Principles: Decrease velocity of exhaust gas and then scrub contaminants by passing through 2 scrubbing systems.

c. Efficiency*: acids 99% d. Capital Cost: $60,000

e. Useful Life: 10 yrs. f. Operating Cost: $22,000

g. Energy*: 42 KWH h. Maintenance Cost: $6,000

i. Availability of construction materials and process chemicals: Readily available.

j. Applicability to manufacturing processes: Easily adapted to plating line, causing little interference with process.

k. Ability to construct with control device, install in available space, and operate within proposed levels: Presents no known problems.

2.

a. Control Device:

b. Operating Principles:

c. Efficiency*: d. Capital Cost:

e. Useful Life: f. Operating Cost:

g. Energy**: h. Maintenance Costs:

i. Availability of construction materials and process chemicals:

j. Applicability to manufacturing processes:

k. Ability to construct with control device, install in available space, and operate within proposed levels:

*Explain method of determining efficiency. Manufacturer's Data.

**Energy to be reported in units of electrical power – KWH design rate.

3.

a. Control Device:

b. Operating Principles:

c. Efficiency*: d. Capital Cost:

e. Life: f. Operating Cost:

g. Energy: h. Maintenance Cost:

*Explain method of determining efficiency above.

i. Availability of construction materials and process chemicals:

j. Applicability to manufacturing processes:

k. Ability to construct with control device, install in available space and operate within proposed levels:

4.

a. Control Device

b. Operating Principles:

c. Efficiency*:

d. Capital Cost:

e. Life:

f. Operating Cost:

g. Energy:

h. Maintenance Cost:

i. Availability of construction materials and process chemicals:

j. Applicability to manufacturing processes:

k. Ability to construct with control device, install in available space, and operate within proposed levels:

F. Describe the control technology selected:

1. Control Device: Packed tower, wet fume scrubber

2. Efficiency*: acids 96%

3. Capital Cost: $60,000

4. Life: 10 yrs.

5. Operating Cost: $22,000

6. Energy: 42 KWH

7. Maintenance Cost: $6,000

8. Manufacturer: Harrison

9. Other locations where employed on similar processes:

a.

(1) Company: Martin Marietta Aerospace

(2) Mailing Address: P. O. Box 5837 (MP-124)

(3) City: Orlando

(4) State: Florida

(5) Environmental Manager: Ray Green

(6) Telephone No.: 305/356-4286

*Explain method of determining efficiency above. Manufacturers Data

(7) Emissions*:

Contaminant	Rate or Concentration

(8) Process Rate*:

b.

(1) Company:

(2) Mailing Address:

(3) City:

(4) State:

*Applicant must provide this information when available. Should this information not be available, applicant must state the reason(s) why.

(5) Environmental Manager:

(6) Telephone No.:

(7) Emissions*:

Contaminant	Rate or Concentration

(8) Process Rate*:

10. Reason for selection and description of systems:

A packed tower, wet fume scrubber is recognized by industry as an acceptable and efficient solution for the removal of contaminants in exhaust systems. In this system, contaminant removal is accomplished by first slowing the fumes to a velocity below 500 fpm and then passing the fumes through two scrubbing stages. The fumes first pass through a water spray or curtain during which a percentage of the larger contaminant particles drop out and the remaining fumes are saturated. The second stage consists of a deep pack of polypropylene, high surface, non-clogging, spherical plate packing media which is continuously wetted by the spray nozzles. The saturated fumes are impinged upon the packing and the contaminants are absorbed and carried away in the wash water.

*Applicant must provide this information when available. Should this information not be available, applicant must state the reason(s) why.

SECTION VII – PREVENTION OF SIGNIFICANT DETERIORATION

NOT APPLICABLE

A. Company Monitored Data

1. _____ no sites _____ TSP _____ ( ) SO^2* _____ Wind spd/dir

Period of monitoring ____/____/____ to ____/____/____
month day year month day year

Other data recorded _____

Attach all data or statistical summaries to this application.

2. Instrumentation, Field and Laboratory

a) Was instrumentation EPA referenced or its equivalent? ____ Yes ____ No

b) Was instrumentation calibrated in accordance with Department procedures? ____ Yes ____ No ____ Unknown

B. Meteorological Data Used for Air Quality Modeling

1. ____ Year(s) of data from ____/____/____ to ____/____/____
month day year month day year

2. Surface data obtained from (location) _____

3. Upper air (mixing height) data obtained from (location) _____

4. Stability wind rose (STAR) data obtained from (location) _____

C. Computer Models Used

1. _____ Modified? If yes, attach description.

2. _____ Modified? If yes, attach description.

3. _____ Modified? If yes, attach description.

4. _____ Modified? If yes, attach description.

Attach copies of all final model runs showing input data, receptor locations, and principle output tables.

D. Applicants Maximum Allowable Emission Data

Pollutant	Emission Rate
TSP	_____ grams/sec
SO^2	_____ grams/sec

E. Emission Data Used in Modeling

Attach list of emission sources. Emission data required is source name, description on point source (on NEDS point number), UTM coordinates, stack data, allowable emissions, and normal operating time.

F. Attach all other information supportive to the PSD review.

*Specify bubbler (B) or continuous (C).

G. Discuss the social and economic impact of the selected technology versus other applicable technologies (i.e., jobs, payroll, production, taxes, energy, etc.). Include assessment of the environmental impact of the sources.

H. Attach scientific, engineering, and technical material, reports, publications, journals, and other competent relevant information describing the theory and application of the requested best available control technology.

MARTIN MARIETTA AEROSPACE

ORLANDO AEROSPACE
POST OFFICE BOX 5837
ORLANDO, FLORIDA 32855
TELEPHONE (305) 352-5788

WALTER O. LOWRIE
PRESIDENT

5 January 1983

Mr. Alex Senkevich
District Manager
State of Florida, Department
of Environmental Regulation
St. Johns River District
3319 Maguire Boulevard
Orlando, Florida 32803

Dear Mr. Senkevich:

This letter is to certify that Richard C. Winfield, Director of Facilities, is the authorized Pollution Control Representative for Martin Marietta Orlando Aerospace. As Pollution Control Representative, Mr. Winfield is authorized to execute all environmental permit applications required by Chapter 403 of the Florida Statutes on behalf of the Corporation.

Very truly yours,

Walter O. Lowrie

Walter O. Lowrie
President

WOL/jc

State of Florida

Department of State

I certify from the records of this office that MARTIN-MARIETTA CORPORATION, a Maryland corporation, is authorized to transact business within the State of Florida, qualified on October 13, 1961.

The charter number for this corporation is 815678.

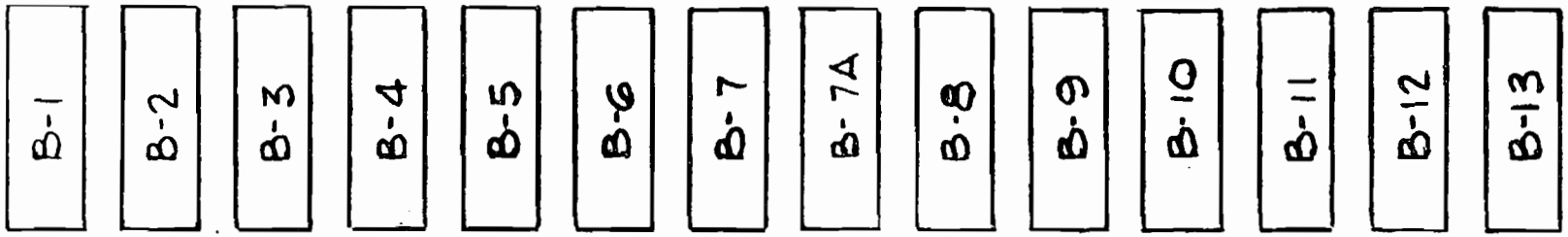
I further certify that said corporation has filed all annual reports and paid all annual report filing fees due this office through December 31, 1983, and its status is active.

Given under my hand and the Great Seal of the State of Florida, at Tallahassee, the Capital, this the 8th day of February, 1984.

George Firestone
Secretary of State

CER-101

Form No. D 512-A Sep 79

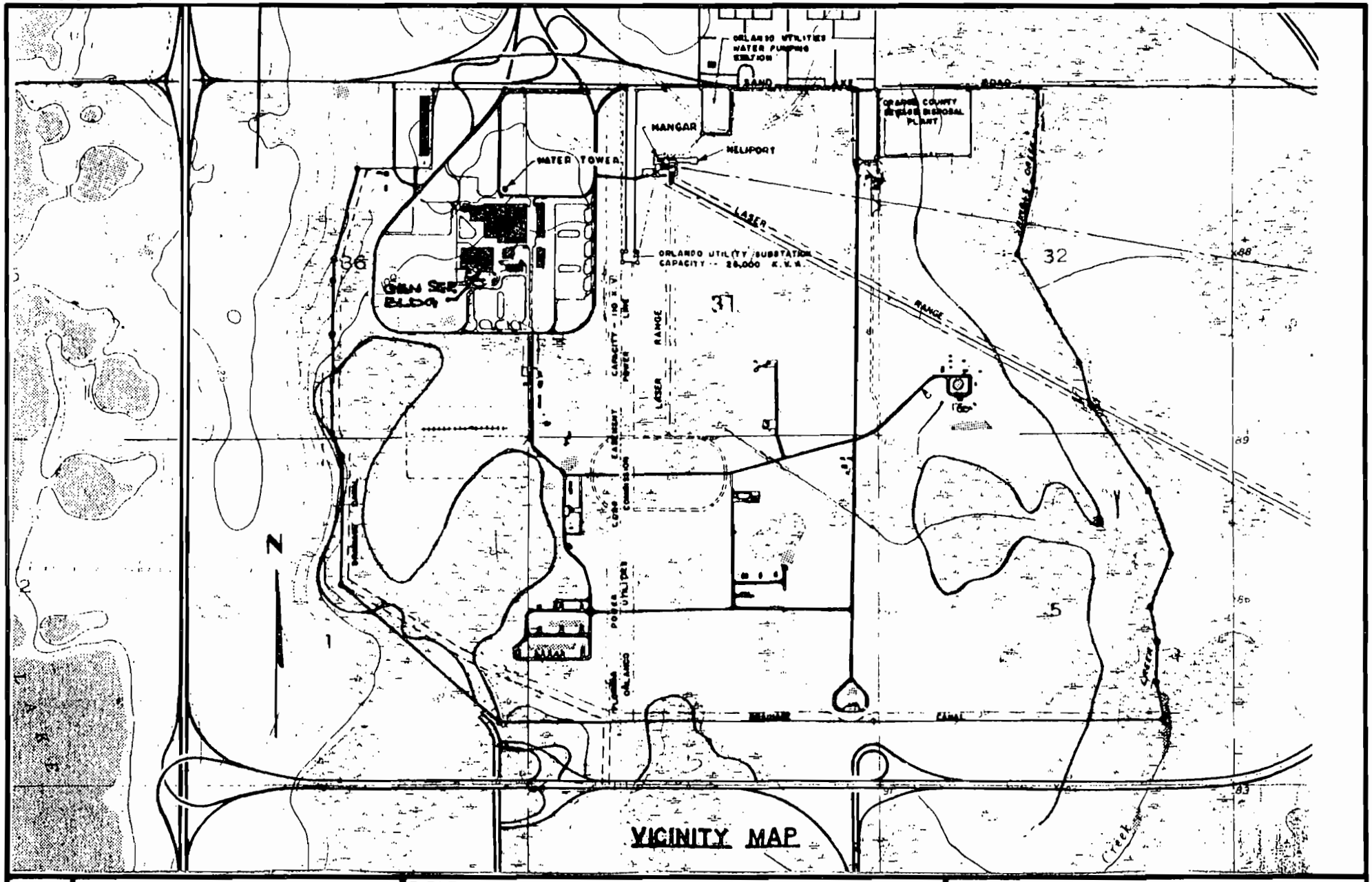


"B" LINE PLATING TANKS

1. DEGREASER
2. TURCO AVIATION
3. WARM RINSE
4. SPRAY RINSE
5. ALUMIN ETCH #2
6. COLD RINSE
7. DIVERSEY #514
8. COLD RINSE
9. CHROMIC ANODIZE
10. ANODIC SEAL
11. CHEM-RITE A22
12. CHEM-RITE A22
13. COLD RINSE
14. HOT RINSE

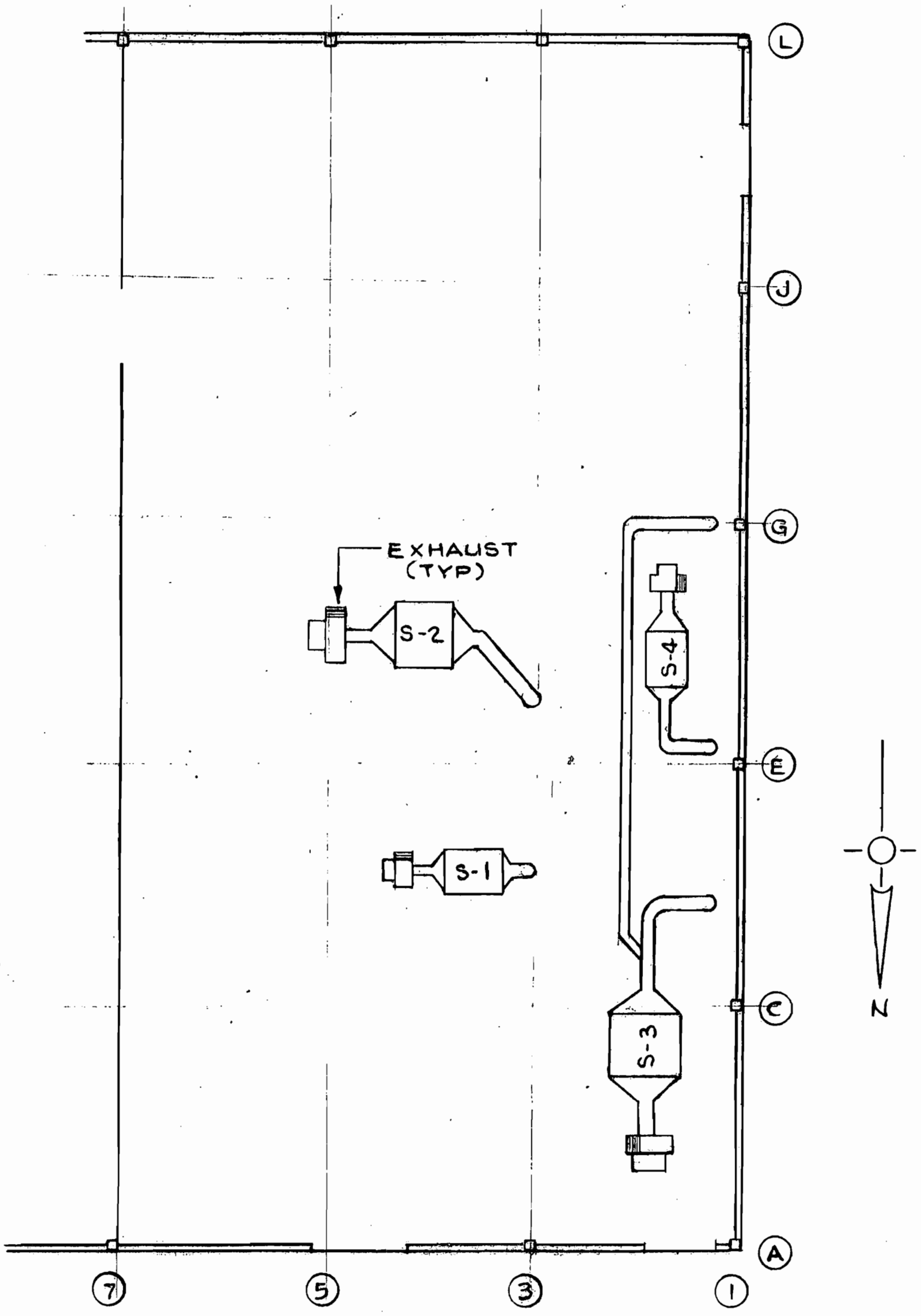
SIZE	WORK SHEET – SKETCH	TITLE:	FACILITIES ENGINEERING
A	DESIGNED BY / DRAWN BY	"B" LINE OPERATIONS	MARTIN MARIETTA AEROSPACE ORLANDO DIVISION
	SKETCH NO. 1		

Form No. D-512-A Sep 79



SIZE	WORK SHEET – SKETCH	TITLE:	FACILITIES ENGINEERING
A	DESIGNED BY / DRAWN BY	MARTIN MARIETTA SITE PLAN	MARTIN MARIETTA AEROSPACE ORLANDO DIVISION
	SKETCH NO. 2		

Form No. D-512-B Sep 79



SIZE	WORK SHEET – SKETCH	TITLE:	FACILITIES ENGINEERING
B	DESIGNED BY / DRAWN BY	ROOF PLAN GENERAL SERVICE BLDG.	MARTIN MARIETTA AEROSPACE ORLANDO DIVISION
	SKETCH NO. 3		

PAID
100
MAR 23 1984
SAINT JOHNS
RIVER DISTRICT

DER AC 48-84652
APR 02 1984
BAQM

RECEIVED
MAR 1984
Saint Johns River District

STATE OF FLORIDA
DEPARTMENT OF ENVIRONMENTAL REGULATION

APPLICATION TO OPERATE/CONSTRUCT AIR POLLUTION SOURCES

SOURCE TYPE: Minor [XX] New[1] [ ] Existing[1]

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

COMPANY NAME: Martin Marietta Aerospace COUNTY: Orange

Identify the specific emission point source(s) addressed in this application (i.e. Lime Kiln No. 4 with Venturi Scrubber; Peeking Unit No. 2, Gas Fired) Wet Fume Scrubber S-3, "F" Line

SOURCE LOCATION: Street Sand Lake Road City Orlando

UTM: East 454,854 M North 3,146,098 M

Latitude 28 ° 26 ' 32 "N Longitude 81 ° 27 ' 39 "W

APPLICANT NAME AND TITLE: Richard C. Winfield, Director of Facilities

APPLICANT ADDRESS: P. O. Box 5837 (MP-124), Orlando, FL 32855

SECTION I: STATEMENTS BY APPLICANT AND ENGINEER

A. APPLICANT

I am the undersigned owner or authorized representative* of Martin Marietta Aerospace

I certify that the statements made in this application for a Construction 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: Richard C. Winfield

Richard C. Winfield, Director of Facilities
Name and Title (Please Type)

Date: 3/6/84 Telephone No. 305/356-3234

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 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.

RAYMOND F. GREEN
CERTIFICATE
9716
STATE OF
FLORIDA
REGISTERED ENGINEER
(Affix Seal)

Signed: Raymond F. Green

Raymond F. Green
Name (Please Type)

Martin Marietta Aerospace
Company Name (Please Type)

P. O. Box 5837 (MP-124), Orlando, FL
Mailing Address (Please Type)

Florida Registration No. 9716 Date: 3/9/84 Telephone No. 305/356-4286

[1]See Section 17-2.02(15) and (22), Florida Administrative Code, (F.A.C.)

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.

Installation of a wet fume scrubber, Harrison model HF-282 or equivalent, 28210 CFM, double packed tower, to exhaust and scrub the fumes from a system. Completed installation will be in compliance with existing regulations.

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

Start of Construction 6-25-84 Completion of Construction 8-25-84

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.)

Installation (including equipment) $55,000

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

Tank F-61, A048-55147 issued: 5/14/82 exp: 5/4/87

Tank F-66, A048-55150 issued: 5/14/82 exp: 5/4/87

Tank F-68, A048-55151 issued: 5/14/82 exp: 5/4/87

E. Is this application associated with or part of a Development of Regional Impact (DRI) pursuant to Chapter 380, Florida Statutes, and Chapter 22F-2, Florida Administrative Code? XX Yes ____ No

F. Normal equipment operating time: hrs/day 8 ; days/wk 5 ; wks/yr 52 ; if power plant, hrs/yr ____ ;

if seasonal, describe: ____

G. 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? n/a
   c. If yes, list non-attainment pollutants.
      ozone
2. Does best available control technology (BACT) apply to this source? If yes, see Section VI. yes
3. Does the State "Prevention of Significant Deterioriation" (PSD) requirements 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

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		
Hydrochloric Acid	Acid	33%	N/A	F-61
Golden Iridite	Acid(as Cr)	.4%	N/A	F-68
Iridite 1 A/B	Acid(as Cr)	1%	N/A	F-70
Granodine #20	Acid	2%	N/A	F-72

B. Process Rate, if applicable: (See Section V, Item 1) Not Applicable

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

2. Product Weight (lbs/hr): _____

C. Airborne Contaminants Emitted:

*Name of Contaminant	Emission[1]		Allowed Emission[2] Rate per Ch. 17-2, F.A.C.	Allowable[3] Emission lbs/hr	Potential Emission[4]		Relate to Flow Diagram
	Maximum lbs/hr	Actual T/yr			lbs/hr	T/yr	
HCl	0.346	T/yr	N/A	N/A	1.729	T/yr	F-61
Cr	**N.S.	T/yr	N/A	N/A	.012	T/yr	F-68
Cr	0.002	T/yr	N/A	N/A	.04	T/yr	F-70
HNO_3/H_3PO_4	.097	T/yr	N/A	N/A	0.78	T/yr	F-72

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

Name and Type (Model & Serial No.)	Contaminant	Efficiency	Range of Particles[5] Size Collected (in microns)	Basis for Efficiency (Sec. V, It[5])
Harrison/HF-282	HCL	80%	N/A	Mfg. Data
	Acid (as Cr)	96%	N/A	Mfg. Data
	HNO_3	80%	N/A	Mfg. Data
	H_3PO_4	95%	N/A	Mfg. Data

[1]See Section V, Item 2.

[2]Reference applicable emission standards and units (e.g., Section 17-2.05(6) Table II, E. (1), F.A.C. – 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)

[5]If Applicable

*Plating tanks F-58, 66 as shown on diagram are not in service.

**Not significant.

E. Fuels NOT APPLICABLE

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

*Units Natural Gas, MMCF/hr; Fuel Oils, barrels/hr; Coal, 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 N/A Maximum _____

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

No solid waste generated. Water from scrubber discharged to Martin Marietta's Industrial Treatment Plant.

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

Stack Height: 30.4' from ground surface ft. Stack Diameter: 46" x 35" ft.

Gas Flow Rate: 28,210 ACFM Gas Exit Temperature: ambient °F.

Water Vapor Content: 100% RH % Velocity: 41.6 FPS

SECTION IV: INCINERATOR INFORMATION

NOT APPLICABLE

Type of Waste	Type O (Plastics)	Type I (Rubbish)	Type II (Refuse)	Type III (Garbage)	Type IV (Pathological)	Type V (Liq & Gas By-prod.)	Type VI (Solid By-prod.)
Lbs/hr Incinerated							

Description of Waste _____

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

Approximate Number of Hours of Operation per day _____ days/week _____

Manufacturer _____

Date Constructed _____ Model No. _____

	Volume $(ft)^3$	Heat Release (BTU/hr)	Fuel		Temperature (^oF)
			Type	BTU/hr	
Primary Chamber					
Secondary Chamber					

Stack Height: _____ ft. Stack Diameter _____ Stack Temp. _____

Gas 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.):

SECTION V: SUPPLEMENTAL REQUIREMENTS

Please provide the following supplements where required for this application.

1. Total process input rate and product weight – show derivation. NOT APPLICABLE
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). ENGINEER'S ESTIMATE OF SYSTEM WITHOUT CONTROLS.
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, etc.). SEE ATTACHED DRAWINGS
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). BASED ON MANUFACTURING DATA.
6. An 8½" 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. SEE SKETCH NO. 1.
7. An 8½" 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). SEE SKETCH NO. 2.
8. An 8½" x 11" plot plan of facility showing the location of manufacturing processes and outlets for airborne emissions. Relate all flows to the flow diagram. SEE SKETCH NO. 3.

9. An application fee of $20, unless exempted by Section 17-4.05(3), F.A.C. 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 [X] No

Contaminant	Rate or Concentration

B. Has EPA declared the best available control technology for this class of sources (If yes, attach copy) [ ] Yes [X] No

Contaminant	Rate or Concentration

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

Contaminant	Rate or Concentration
HCl	80% Eff. 0.346 T/yr
Cr (as acid)	96% Eff. 0.002 T/yr
HNO_3/H_3PO_4	87% Eff. (Average) 0.097 T/yr

D. Describe the existing control and treatment technology (if any). None

1. Control Device/System:
2. Operating Principles:
3. Efficiency:*
4. Capital Costs:
5. Useful Life:
6. Operating Costs:
7. Energy:
8. Maintenance Cost:
9. Emissions:

Contaminant	Rate or Concentration

*Explain method of determining D 3 above.

10. Stack Parameters

a. Height: ft. b. Diameter: ft.

c. Flow Rate: ACFM d. Temperature: °F

e. Velocity: FPS

E. Describe the control and treatment technology available (As many types as applicable, use additional pages if necessary).

1.

a. Control Device: Packed tower, wet fume scrubber

b. Operating Principles: Decrease velocity of exhaust gas and then scrub contaminants by passing through 2 scrubbing systems

c. Efficiency*: varies (see III D) d. Capital Cost: $60,000

e. Useful Life: 10 yrs. f. Operating Cost: $22,000

g. Energy*: 42 KWH h. Maintenance Cost: $6,000

i. Availability of construction materials and process chemicals:
Readily available

j. Applicability to manufacturing processes: Easily adapted to plating line, causing little interference with process.

k. Ability to construct with control device, install in available space, and operate within proposed levels:
Presents no known problems.

2.

a. Control Device:

b. Operating Principles:

c. Efficiency*: d. Capital Cost:

e. Useful Life: f. Operating Cost:

g. Energy**: h. Maintenance Costs:

i. Availability of construction materials and process chemicals:

j. Applicability to manufacturing processes:

k. Ability to construct with control device, install in available space, and operate within proposed levels:

*Explain method of determining efficiency. Manufacturer's Data

**Energy to be reported in units of electrical power – KWH design rate.

3.

a. Control Device:

b. Operating Principles:

c. Efficiency*: d. Capital Cost:

e. Life: f. Operating Cost:

g. Energy: h. Maintenance Cost:

*Explain method of determining efficiency above.

i. Availability of construction materials and process chemicals:

j. Applicability to manufacturing processes:

k. Ability to construct with control device, install in available space and operate within proposed levels:

4.

a. Control Device

b. Operating Principles:

c. Efficiency*:

d. Capital Cost:

e. Life:

f. Operating Cost:

g. Energy:

h. Maintenance Cost:

i. Availability of construction materials and process chemicals:

j. Applicability to manufacturing processes:

k. Ability to construct with control device, install in available space, and operate within proposed levels:

F. Describe the control technology selected: Packed tower, wet fume scrubber

1. Control Device:
2. Efficiency*: varies (see III D)
3. Capital Cost: $60,000
4. Life: 10 yrs.
5. Operating Cost: $6,000
6. Energy: 42 KWH
7. Maintenance Cost: $22,000
8. Manufacturer: Harrison
9. Other locations where employed on similar processes:

a.

(1) Company: Martin Marietta Aerospace

(2) Mailing Address: P. O. Box 5837 (MP-124)

(3) City: Orlando

(4) State: Florida

(5) Environmental Manager: Ray Green

(6) Telephone No.: 305/356-4286

*Explain method of determining efficiency above. Manufacturers Data

(7) Emissions*:

Contaminant	Rate or Concentration

(8) Process Rate*:

b.

(1) Company:

(2) Mailing Address:

(3) City:

(4) State:

*Applicant must provide this information when available. Should this information not be available, applicant must state the reason(s) why.

(5) Environmental Manager:

(6) Telephone No.:

(7) Emissions*:

Contaminant	Rate or Concentration

(8) Process Rate*:

10. Reason for selection and description of systems:

A packed tower, wet fume scrubber is recognized by industry as an acceptable and efficient solution for the removal of contaminants in exhaust systems. In this system, contaminant removal is accomplished by first slowing the fumes to a velocity below 500 fpm and then passing the fumes through two scrubbing stages. The fumes first pass through a water spray or curtain during which a percentage of the larger contaminant particles drop out and the remaining fumes are saturated. The second stage consists of a deep pack of polypropylene, high surface, non-clogging, spherical plate packing media which is continuously wetted by the spray nozzles. The saturated fumes are impinged upon the packing and the contaminants are absorbed and carried away in the wash water.

*Applicant must provide this information when available. Should this information not be available, applicant must state the reason(s) why.

SECTION VII – PREVENTION OF SIGNIFICANT DETERIORATION

NOT APPLICABLE

A. Company Monitored Data

1. _____ no sites _____ TSP _____ ( ) SO^2* _____ Wind spd/dir

Period of monitoring ____/____/____ to ____/____/____
month day year month day year

Other data recorded _____

Attach all data or statistical summaries to this application.

2. Instrumentation, Field and Laboratory

a) Was instrumentation EPA referenced or its equivalent? _____ Yes _____ No

b) Was instrumentation calibrated in accordance with Department procedures? _____ Yes _____ No _____ Unknown

B. Meteorological Data Used for Air Quality Modeling

1. _____ Year(s) of data from ____/____/____ to ____/____/____
month day year month day year

2. Surface data obtained from (location) _____

3. Upper air (mixing height) data obtained from (location) _____

4. Stability wind rose (STAR) data obtained from (location) _____

C. Computer Models Used

1. _____ Modified? If yes, attach description.

2. _____ Modified? If yes, attach description.

3. _____ Modified? If yes, attach description.

4. _____ Modified? If yes, attach description.

Attach copies of all final model runs showing input data, receptor locations, and principle output tables.

D. Applicants Maximum Allowable Emission Data

Pollutant	Emission Rate
TSP	_____ grams/sec
SO^2	_____ grams/sec

E. Emission Data Used in Modeling

Attach list of emission sources. Emission data required is source name, description on point source (on NEDS point number), UTM coordinates, stack data, allowable emissions, and normal operating time.

F. Attach all other information supportive to the PSD review.

*Specify bubbler (B) or continuous (C).

G. Discuss the social and economic impact of the selected technology versus other applicable technologies (i.e., jobs, payroll, production, taxes, energy, etc.). Include assessment of the environmental impact of the sources.

H. Attach scientific, engineering, and technical material, reports, publications, journals, and other competent relevant information describing the theory and application of the requested best available control technology.

MARTIN MARIETTA AEROSPACE

ORLANDO AEROSPACE
POST OFFICE BOX 5837
ORLANDO, FLORIDA 32855
TELEPHONE (305) 352-5788

WALTER O. LOWRIE
PRESIDENT

5 January 1983

Mr. Alex Senkevich
District Manager
State of Florida, Department
of Environmental Regulation
St. Johns River District
3319 Maguire Boulevard
Orlando, Florida 32803

Dear Mr. Senkevich:

This letter is to certify that Richard C. Winfield, Director of Facilities, is the authorized Pollution Control Representative for Martin Marietta Orlando Aerospace. As Pollution Control Representative, Mr. Winfield is authorized to execute all environmental permit applications required by Chapter 403 of the Florida Statutes on behalf of the Corporation.

Very truly yours,

Walter O. Lowrie

Walter O. Lowrie
President

WOL/jc

State of Florida

Department of State

I certify from the records of this office that MARTIN-MARIETTA CORPORATION, a Maryland corporation, is authorized to transact business within the State of Florida, qualified on October 13, 1961.

The charter number for this corporation is 815678.

I further certify that said corporation has filed all annual reports and paid all annual report filing fees due this office through December 31, 1983, and its status is active.

Given under my hand and the Great Seal of the State of Florida, at Tallahassee, the Capital, this the 8th day of February, 1984.

George Firestone
Secretary of State

CER-101

Form No. D 512-A Sep 79

SIZE A

WORK SHEET – SKETCH

DESIGNED BY

DRAWN BY

SKETCH NO. 1

TITLE: "F" LINE OPERATIONS

"F" LINE PLATING TANKS

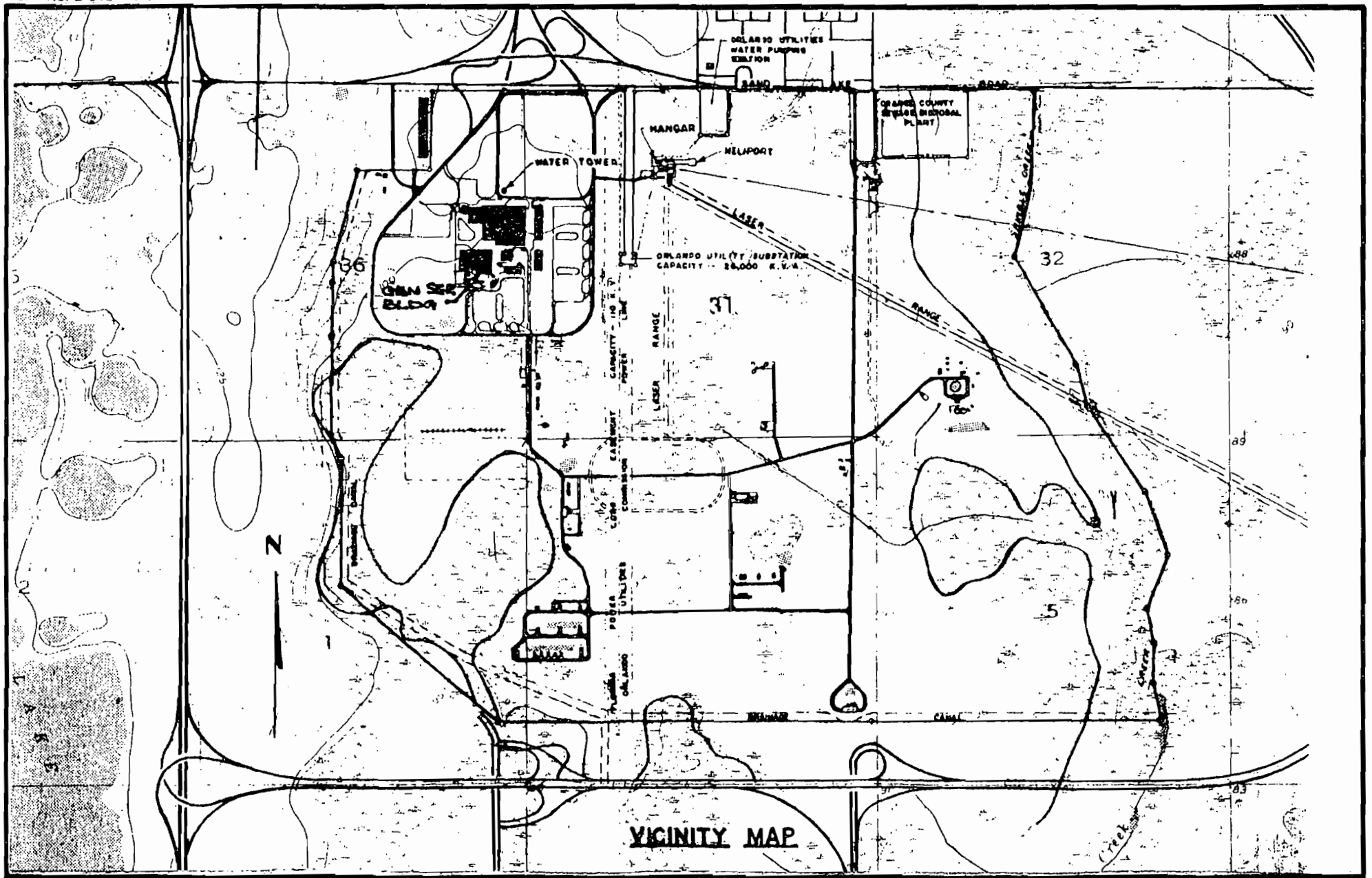
DEGREASER	F-56
NOT IN SERVICE	F-57
KEMTEX 295	F-58
WARM RINSE	F-59
AMMONIUM NITRATE	F-60
HYDROCHLORIC ACID	F-61
COLD RINSE	F-62
CYANIDE RINSE	F-63
CADMIUM PLATE	F-64
COLD RINSE	F-65
NOT IN SERVICE	F-66
NOT IN SERVICE	F-67
GOLDEN IRRIDITE	F-68
NOT IN SERVICE	F-69
IRRIDITE	F-70
COLD RINSE	F-71
GRANODINE 20	F-72
COLD RINSE	F-73
DEOXALITE	F-74

FACILITIES ENGINEERING

MARTIN MARIETTA AEROSPACE
ORLANDO DIVISION

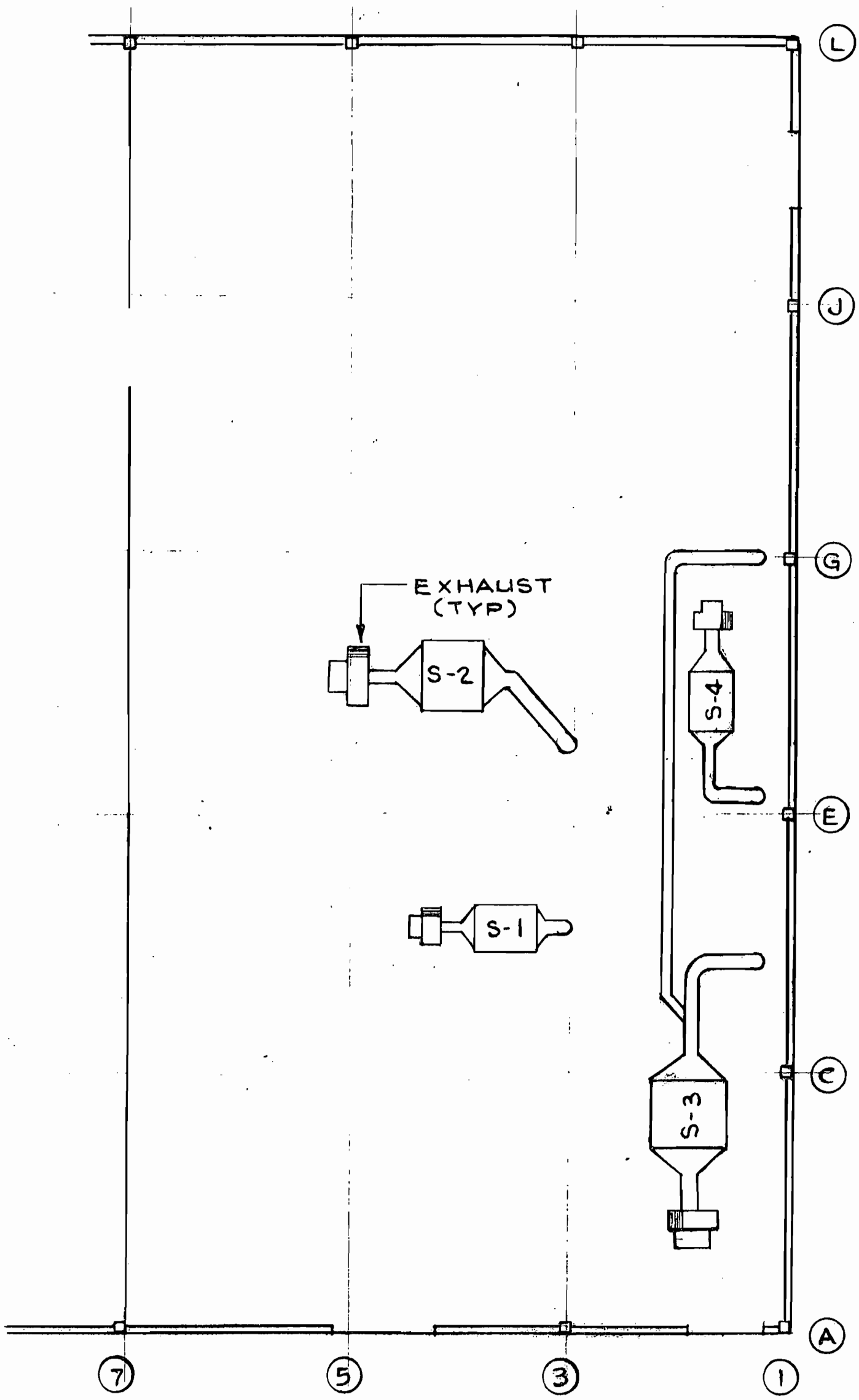
Best Available Copy

Form No. D-512-A Sep 79



SIZE	WORK SHEET – SKETCH	TITLE:	FACILITIES ENGINEERING
A	DESIGNED BY / DRAWN BY	MARTIN MARIETTA SITE PLAN	MARTIN MARIETTA AEROSPACE ORLANDO DIVISION
	SKETCH NO. 2		

Form No. D-512-B Sep 79



SIZE	WORK SHEET – SKETCH	TITLE:	FACILITIES ENGINEERING
B	DESIGNED BY / DRAWN BY	ROOF PLAN GENERAL SERVICE BLDG.	MARTIN MARIETTA AEROSPACE ORLANDO DIVISION
	SKETCH NO. 3		

AC48-84653

PAID
100
MAR 23 1984
SAINT JOHNS
RIVER DISTRICT

DER
APR 02 1984
BAQM

STATE OF FLORIDA
DEPARTMENT OF ENVIRONMENTAL REGULATION

APPLICATION TO OPERATE/CONSTRUCT AIR POLLUTION SOURCES

RECEIVED
MAR 1984
Saint Johns River District

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

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

COMPANY NAME: Martin Marietta Aerospace COUNTY: Orange

Identify the specific emission point source(s) addressed in this application (i.e. Lime Kiln No. 4 with Venturi Scrubber; Peeking Unit No. 2, Gas Fired) Wet Fume Scrubber S-4, "F" Line

SOURCE LOCATION: Street Sand Lake Road City Orlando

UTM: East 454,854 M North 3,146,098 M

Latitude 28 ° 26 ' 32 "N Longitude 81 ° 27 ' 39 "W

APPLICANT NAME AND TITLE: Richard C. Winfield, Director of Facilities

APPLICANT ADDRESS: P.O. Box 5837 (MP-124), Orlando, FL 32855

SECTION I: STATEMENTS BY APPLICANT AND ENGINEER

A. APPLICANT

I am the undersigned owner or authorized representative* of Martin Marietta Aerospace

I certify that the statements made in this application for a Construction 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: Richard C Winfield

Richard C. Winfield

Name and Title (Please Type)

Date: 3/6/84 Telephone No. 305/356-3234

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 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.

(Affix Seal)

Signed: Raymond F. Green

Raymond F. Green

Name (Please Type)

Martin Marietta Aerospace

Company Name (Please Type)

P. O. Box 5837 (MP-124) Orlando, FL

Mailing Address (Please Type)

Florida Registration No. 9716 Date: 3/8/84 Telephone No. 305/356-4286

[1]See Section 17-2.02(15) and (22), Florida Administrative Code, (F.A.C.)

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.

Installation of a wet fume scrubber, Harrison model HF-71, 7050 CFM, single packed tower, to exhaust and scrub the fumes from a series of manifolded to a common exhaust system. Completed installation will be in compliance with existing regulations.

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

Start of Construction 6/25/84 Completion of Construction 8/25/84

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.)

Installation (plus equipment costs) $40,000

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

N/A

E. Is this application associated with or part of a Development of Regional Impact (DRI) pursuant to Chapter 380, Florida Statutes, and Chapter 22F-2, Florida Administrative Code? X Yes ____ No

F. Normal equipment operating time: hrs/day 8 ; days/wk 5 ; wks/yr 52 ; if power plant, hrs/yr ____ ;

if seasonal, describe: ____

G. 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? n/a
   c. If yes, list non-attainment pollutants.
      ozone
2. Does best available control technology (BACT) apply to this source? If yes, see Section VI. yes
3. Does the State "Prevention of Significant Deterioriation" (PSD) requirements 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

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		
Cyanide Rinse	NaCN	5%	N/A	F-63
Cadmium Plate	NaOH	4%	N/A	F-64
Cadmium Plate	$Cd(CN)_2$	16%	N/A	F-64

B. Process Rate, if applicable: (See Section V, Item 1) Not Applicable

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

2. Product Weight (lbs/hr): _____

C. Airborne Contaminants Emitted:

Name of Contaminant	Emission[1]		Allowed Emission[2] Rate per Ch. 17-2, F.A.C.	Allowable[3] Emission lbs/hr	Potential Emission[4]		Relate to Flow Diagram
	Maximum lbs/hr	Actual T/yr			lbs/hr	T/yr	
NaCN(as Na)	0.01	T/yr	N/A	N/A	0.21	T/yr	F-63
NaOH(as Na)	0.005	T/yr	N/A	N/A	0.13	T/yr	F-64
$Cd(CN)_2$(as Cd)	0.02	T/yr	N/A	N/A	0.57	T/yr	F-64

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

Name and Type (Model & Serial No.)	Contaminant	Efficiency	Range of Particles[5] Size Collected (in microns)	Basis for Efficiency (Sec. V, It[5]
Harrison/HF-71	NaCN	97%	N/A	Mfg. Data
Harrison/HF-71	NaOH	96%	N/A	Mfg. Data
Harrison/HF-71	$Cd(CN)_2$	97%	N/A	Mfg. Data

[1]See Section V, Item 2.

[2]Reference applicable emission standards and units (e.g., Section 17-2.05(6) Table II, E. (1), F.A.C. – 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)

[5]If Applicable

E. Fuels NOT APPLICABLE

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

*Units Natural Gas, MMCF/hr; Fuel Oils, barrels/hr; Coal, 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 N/A Maximum _____

G. Indicate liquid or solid wastes generated and method of disposal.
No solid waste generated. Waste from scrubber discharged to Martin Marietta's Industrial Treatment Plant.

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

Stack Height: 27.5 (from ground surface) ft. Stack Diameter: 23 1/4" x 17 5/8" ft.

Gas Flow Rate: 7,050 ACFM Gas Exit Temperature: ambient °F.

Water Vapor Content: 100% RH % Velocity: 35 FPS

SECTION IV: INCINERATOR INFORMATION

NOT APPLICABLE

Type of Waste	Type O (Plastics)	Type I (Rubbish)	Type II (Refuse)	Type III (Garbage)	Type IV (Pathological)	Type V (Liq & Gas By-prod.)	Type VI (Solid By-prod.)
Lbs/hr Incinerated							

Description of Waste _____

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

Approximate Number of Hours of Operation per day _____ days/week _____

Manufacturer _____

Date Constructed _____ Model No. _____

	Volume $(ft)^3$	Heat Release (BTU/hr)	Fuel		Temperature (^oF)
			Type	BTU/hr	
Primary Chamber					
Secondary Chamber					

Stack Height: _____ ft. Stack Diameter _____ Stack Temp. _____

Gas 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.):

SECTION V: SUPPLEMENTAL REQUIREMENTS

Please provide the following supplements where required for this application.

1. Total process input rate and product weight – show derivation. NOT APPLICABLE.
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). ENGINEER'S ESTIMATE OF SYSTEM WITHOUT CONTROLS.
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, etc.). SEE ATTACHED DRAWINGS.
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). BASED ON MANUFACTURING DATA.
6. An 8½" 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. SEE SKETCH NO. 1-B.
7. An 8½" 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). SEE SKETCH NO. 2.
8. An 8½" x 11" plot plan of facility showing the location of manufacturing processes and outlets for airborne emissions. Relate all flows to the flow diagram. SEE SKETCH NO. 3

9. An application fee of $20, unless exempted by Section 17-4.05(3), F.A.C. 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 [X] No

Contaminant	Rate or Concentration

B. Has EPA declared the best available control technology for this class of sources (If yes, attach copy) [ ] Yes [X] No

Contaminant	Rate or Concentration

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

Contaminant	Rate or Concentration	
NaCN (as Na)	97% eff	0.01 T/yr.
NaOH (as Na)	96% eff	0.005 T/yr.
$Cd(CN)_2$ (as Cd)	97% eff	0.02 T/yr.

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

1. Control Device/System:
2. Operating Principles:
3. Efficiency:*
4. Capital Costs:
5. Useful Life:
6. Operating Costs:
7. Energy:
8. Maintenance Cost:
9. Emissions:

Contaminant	Rate or Concentration

*Explain method of determining D 3 above.

10. Stack Parameters

a. Height: ft. b. Diameter: ft.

c. Flow Rate: ACFM d. Temperature: °F

e. Velocity: FPS

E. Describe the control and treatment technology available (As many types as applicable, use additional pages if necessary).

1.

a. Control Device: Packed tower, wet fume scrubber

b. Operating Principles: Decrease velocity of exhaust gas and then scrub contaminants by passing through 2 scrubbing system.

c. Efficiency*: 96% and 97% d. Capital Cost: 40,000

e. Useful Life: 10 yrs. f. Operating Cost: 6,800

g. Energy*: 13 KWH h. Maintenance Cost: 4,000

i. Availability of construction materials and process chemicals: Readily available.

j. Applicability to manufacturing processes: Easily adapted to plating line, creating little interference with process.

k. Ability to construct with control device, install in available space, and operate within proposed levels: Presents no known problems.

2.

a. Control Device:

b. Operating Principles:

c. Efficiency*: d. Capital Cost:

e. Useful Life: f. Operating Cost:

g. Energy**: h. Maintenance Costs:

i. Availability of construction materials and process chemicals:

j. Applicability to manufacturing processes:

k. Ability to construct with control device, install in available space, and operate within proposed levels:

*Explain method of determining efficiency. Manufacturer's Data.

**Energy to be reported in units of electrical power – KWH design rate.

3.

a. Control Device:

b. Operating Principles:

c. Efficiency*: d. Capital Cost:

e. Life: f. Operating Cost:

g. Energy: h. Maintenance Cost:

*Explain method of determining efficiency above.

i. Availability of construction materials and process chemicals:

j. Applicability to manufacturing processes:

k. Ability to construct with control device, install in available space and operate within proposed levels:

4.

a. Control Device

b. Operating Principles:

c. Efficiency*:

d. Capital Cost:

e. Life:

f. Operating Cost:

g. Energy:

h. Maintenance Cost:

i. Availability of construction materials and process chemicals:

j. Applicability to manufacturing processes:

k. Ability to construct with control device, install in available space, and operate within proposed levels:

F. Describe the control technology selected:

1. Control Device: Packed tower, wet fume scrubber
2. Efficiency*: 96% and 97%
3. Capital Cost: $40,000
4. Life: 10 yrs.
5. Operating Cost: $6,800
6. Energy: 13 KWH
7. Maintenance Cost: $4,000
8. Manufacturer: Harrison
9. Other locations where employed on similar processes:

a.

(1) Company: Martin Marietta Aerospace

(2) Mailing Address: P. O. Box 5837 (MP-124)

(3) City: Orlando

(4) State: Florida

(5) Environmental Manager: Ray Green

(6) Telephone No.: 305/356-4286

*Explain method of determining efficiency above. Manufacturer's Data

(7) Emissions*:

Contaminant	Rate or Concentration

(8) Process Rate*:

b.

(1) Company:

(2) Mailing Address:

(3) City:

(4) State:

*Applicant must provide this information when available. Should this information not be available, applicant must state the reason(s) why.

(5) Environmental Manager:

(6) Telephone No.:

(7) Emissions*:

Contaminant	Rate or Concentration

(8) Process Rate*:

10. Reason for selection and description of systems:

A packed tower, wet fume scrubber is recognized by industry as an acceptable and efficient solution for the removal of contaminants in exhaust systems. In this system, contaminant removal is accomplished by first slowing the fumes to a velocity below 500 fpm and then passing the fumes through two scrubbing stages. The fumes first pass through a water spray or curtain during which a percentage of the larger contaminant particles drop out and the remaining fumes are saturated. The second stage consists of a deep pack of polypropylene, high surface, non-clogging, spherical plate packing media which is continuously wetted by the spray nozzles. The saturated fumes are impinged upon the packing and the contaminants are absorbed and carried away in the wash water.

*Applicant must provide this information when available. Should this information not be available, applicant must state the reason(s) why.

SECTION VII – PREVENTION OF SIGNIFICANT DETERIORATION

NOT APPLICABLE

A. Company Monitored Data

1. _____ no sites _____ TSP _____ ( ) SO^2* _____ Wind spd/dir

Period of monitoring ____/____/____ to ____/____/____
month day year month day year

Other data recorded _____

Attach all data or statistical summaries to this application.

2. Instrumentation, Field and Laboratory

a) Was instrumentation EPA referenced or its equivalent? _____ Yes _____ No

b) Was instrumentation calibrated in accordance with Department procedures? _____ Yes _____ No _____ Unknown

B. Meteorological Data Used for Air Quality Modeling

1. _____ Year(s) of data from ____/____/____ to ____/____/____
month day year month day year

2. Surface data obtained from (location) _____

3. Upper air (mixing height) data obtained from (location) _____

4. Stability wind rose (STAR) data obtained from (location) _____

C. Computer Models Used

1. _____ Modified? If yes, attach description.

2. _____ Modified? If yes, attach description.

3. _____ Modified? If yes, attach description.

4. _____ Modified? If yes, attach description.

Attach copies of all final model runs showing input data, receptor locations, and principle output tables.

D. Applicants Maximum Allowable Emission Data

Pollutant	Emission Rate
TSP	_____ grams/sec
SO^2	_____ grams/sec

E. Emission Data Used in Modeling

Attach list of emission sources. Emission data required is source name, description on point source (on NEDS point number), UTM coordinates, stack data, allowable emissions, and normal operating time.

F. Attach all other information supportive to the PSD review.

*Specify bubbler (B) or continuous (C).

G. Discuss the social and economic impact of the selected technology versus other applicable technologies (i.e., jobs, payroll, production, taxes, energy, etc.). Include assessment of the environmental impact of the sources.

H. Attach scientific, engineering, and technical material, reports, publications, journals, and other competent relevant information describing the theory and application of the requested best available control technology.

MARTIN MARIETTA AEROSPACE

ORLANDO AEROSPACE
POST OFFICE BOX 5837
ORLANDO, FLORIDA 32855
TELEPHONE (305) 352-5788

WALTER O. LOWRIE
PRESIDENT

5 January 1983

Mr. Alex Senkevich
District Manager
State of Florida, Department
of Environmental Regulation
St. Johns River District
3319 Maguire Boulevard
Orlando, Florida 32803

Dear Mr. Senkevich:

This letter is to certify that Richard C. Winfield, Director of Facilities, is the authorized Pollution Control Representative for Martin Marietta Orlando Aerospace. As Pollution Control Representative, Mr. Winfield is authorized to execute all environmental permit applications required by Chapter 403 of the Florida Statutes on behalf of the Corporation.

Very truly yours,

Walter O. Lowrie

Walter O. Lowrie
President

WOL/jc

State of Florida

Department of State

I certify from the records of this office that MARTIN-MARIETTA CORPORATION, a Maryland corporation, is authorized to transact business within the State of Florida, qualified on October 13, 1961.

The charter number for this corporation is 815678.

I further certify that said corporation has filed all annual reports and paid all annual report filing fees due this office through December 31, 1983, and its status is active.

Given under my hand and the Great Seal of the State of Florida, at Tallahassee, the Capital, this the 8th day of February, 1984.

George Firestone
Secretary of State

CER-101

SIZE A

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DESIGNED BY

DRAWN BY

SKETCH NO. 1

TITLE: "F" LINE OPERATIONS

FACILITIES ENGINEERING
MARTIN MARIETTA AEROSPACE
ORLANDO DIVISION

"F" LINE PLATING TANKS

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NOT IN SERVICE	F-57
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Best Available Copy

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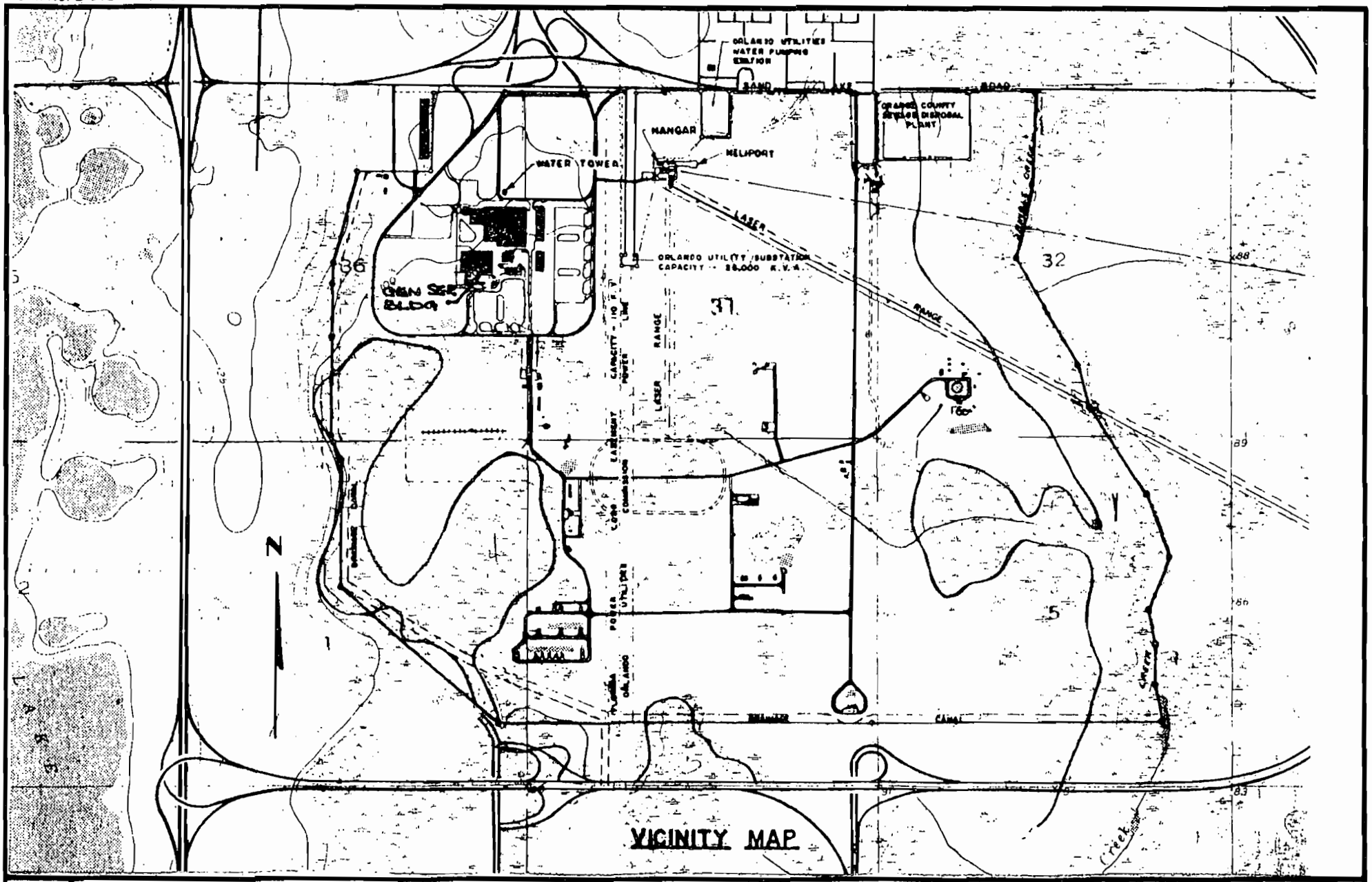

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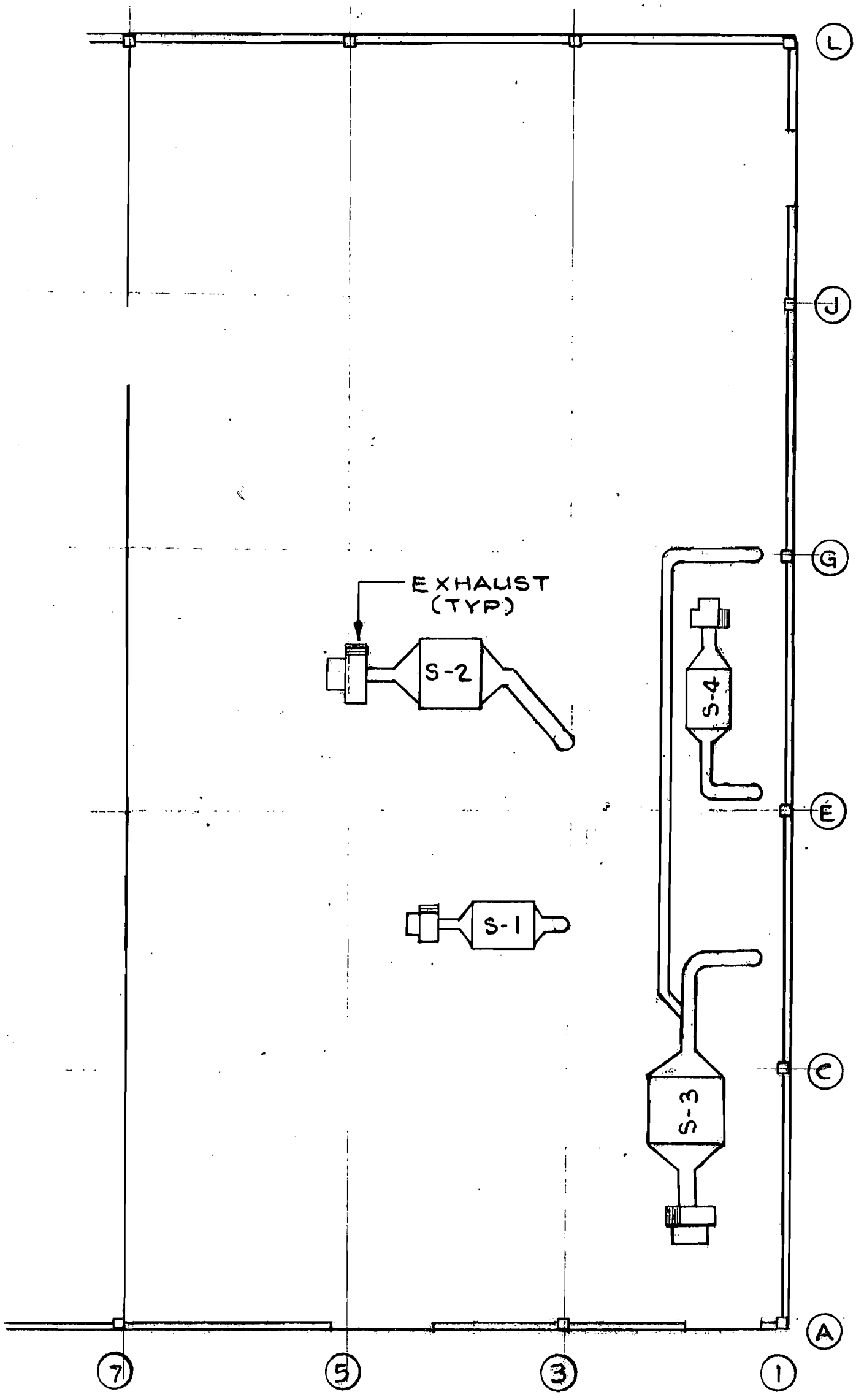

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B	DESIGNED BY / DRAWN BY	ROOF PLAN GENERAL SERVICE BLDG.	MARTIN MARIETTA AEROSPACE ORLANDO DIVISION
	SKETCH NO. 3		

PAID
160
MAR 30 1984
SAINT JOHNS
RIVER DISTRICT

STATE OF FLORIDA
DEPARTMENT OF ENVIRONMENTAL REGULATION

APPLICATION TO OPERATE/CONSTRUCT AIR POLLUTION SOURCES

RECEIVED
APR 1984
Saint Johns River District

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

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

COMPANY NAME: Martin Marietta Aerospace COUNTY: Orange

Identify the specific emission point source(s) addressed in this application (i.e. Lime Kiln No. 4 with Venturi Scrubber; Peeking Unit No. 2, Gas Fired) Main Plant Dust Collector Unit No. 6

SOURCE LOCATION: Street Sandlake Rd City Orlando

UTM: East 455,096 m North 3,146,300m

Latitude 28 ° 26 ' 36 "N Longitude 81 ° 27 ' 31 "W

APPLICANT NAME AND TITLE: Richard C. Winfield, Director of Facilities

APPLICANT ADDRESS: P.O. Box 5837 MP-124

SECTION I: STATEMENTS BY APPLICANT AND ENGINEER

A. APPLICANT

I am the undersigned owner or authorized representative* of Martin Marietta

I certify that the statements made in this application for a Construction 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: Richard C Winfield

Richard C. Winfield DIRECTOR-FACILITIES
Name and Title (Please Type)

Date: 3/16/84 Telephone No. 305-356-3234

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 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.

RAYMOND F. GREEN CERTIFICATE NO. 9716 STATE OF FLORIDA REGISTERED ENGINEER
(Affix Seal)

Signed: Raymond F. Green

Raymond F. Green
Name (Please Type)

Martin Marietta Aerospace
Company Name (Please Type)

P.O. Box 5837 (MP-124) Orlando, FL
Mailing Address (Please Type)

Florida Registration No. 9716 Date: 3/21/84 Telephone No. 305-356-4286

[1]See Section 17-2.02(15) and (22), Florida Administrative Code, (F.A.C.)

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.

Installation of a dust collector system, Sternvent Co. Model TI-80, dust collector CY-36, and magna/pack HEPA filters model-4, to exhaust (5,000 CFM) and collect ablative-type dust. Completed installation will be in compliance with existing regulations.

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

Start of Construction May 1984 Completion of Construction July 1984

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.)

Installation (including equipment) $53,000

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

N/A

E. Is this application associated with or part of a Development of Regional Impact (DRI) pursuant to Chapter 380, Florida Statutes, and Chapter 22F-2, Florida Administrative Code? X Yes ____ No

F. Normal equipment operating time: hrs/day 8 ; days/wk 5 ; wks/yr 52 ; if power plant, hrs/yr ____ ; if seasonal, describe: Based on 40% Utilization.

G. 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? N/A
   c. If yes, list non-attainment pollutants. Ozone
2. Does best available control technology (BACT) apply to this source? If yes, see Section VI. Yes
3. Does the State "Prevention of Significant Deterioriation" (PSD) requirements 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

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		
(1) Ablative - type (see below) Dust		1 grain / ft3	N/A	Magna-Pak filter

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

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

2. Product Weight (lbs/hr): _____

C. Airborne Contaminants Emitted:

Name of Contaminant	Emission[1]		Allowed Emission[2] Rate per Ch. 17-2, F.A.C.	Allowable[3] Emission lbs/hr	Potential Emission[4]		Relate to Flow Diagram
	Maximum lbs/hr	Actual T/yr			lbs/hr	T/yr	
(1) ablative -	0.04 T/yr		N/A	N/A	17.1	17.8	Magna-pak filter

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

Name and Type (Model & Serial No.)	Contaminant (1)	Efficiency	Range of Particles[5] Size Collected (in microns)	Basis for Efficiency (Sec. V, It[5])
Sternvent/dust collector Cy-36		99.6% by wt.	5 microns	Mfg Data
Sternvent/Pulse collector TL-80				
Magna/Pack Model-4		99.97%	.3 Microns	Mfg. Data

[1] See Section V, Item 2.

[2] Reference applicable emission standards and units (e.g., Section 17-2.05(6) Table II, E. (1), F.A.C. – 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)

[5] If Applicable

(1) Ablative type dust consists of Silica Phenolic, asbestos phenolic, quartz-filled epoxy resin and graphite (some small quantities of aluminum)

E. Fuels Not applicable

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

*Units Natural Gas, MMCF/hr; Fuel Oils, barrels/hr; Coal, 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.
Solid waste dust and particulates from cyclone and bag house are hauled to a sanitary landfill. Those wastes containing asbestos shall be disposed of in accordance with the state and local approved methods.

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

Stack Height: 28.5 (above grade) ft. Stack Diameter: 48" x 36" ft.

Gas Flow Rate: 5,000 ACFM Gas Exit Temperature: ambient °F.

Water Vapor Content: N/A % Velocity: 7 FPS

SECTION IV: INCINERATOR INFORMATION

Not Applicable

Type of Waste	Type O (Plastics)	Type I (Rubbish)	Type II (Refuse)	Type III (Garbage)	Type IV (Pathological)	Type V (Liq & Gas By-prod.)	Type VI (Solid By-prod.)
Lbs/hr Incinerated							

Description of Waste _____

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

Approximate Number of Hours of Operation per day _____ days/week _____

Manufacturer _____

Date Constructed _____ Model No. _____

	Volume $(ft)^3$	Heat Release (BTU/hr)	Fuel		Temperature (^oF)
			Type	BTU/hr	
Primary Chamber					
Secondary Chamber					

Stack Height: _____ ft. Stack Diameter _____ Stack Temp. _____

Gas 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.):

SECTION V: SUPPLEMENTAL REQUIREMENTS

Please provide the following supplements where required for this application.

1. Total process input rate and product weight – show derivation. Not applicable
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). Engineer's estimate of system without controls
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, etc.). see attached drawings
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). Based on manufacture's Data
6. An 8½" 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. See sketch No. 1
7. An 8½" 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). See sketch No. 2
8. An 8½" x 11" plot plan of facility showing the location of manufacturing processes and outlets for airborne emissions. Relate all flows to the flow diagram. See Sketch No. 3

9. An application fee of $20, unless exempted by Section 17-4.05(3), F.A.C. 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 [X] No

Contaminant	Rate or Concentration

B. Has EPA declared the best available control technology for this class of sources (If yes, attach copy) [ ] Yes [X] No

Contaminant	Rate or Concentration

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

Contaminant	Rate or Concentration
Ablative-type Dust/particulates	99.97% eff. @ .3 microns

D. Describe the existing control and treatment technology (if any). not applicable

1. Control Device/System:
2. Operating Principles:
3. Efficiency:*
4. Capital Costs:
5. Useful Life:
6. Operating Costs:
7. Energy:
8. Maintenance Cost:
9. Emissions:

Contaminant	Rate or Concentration

*Explain method of determining D 3 above.

10. Stack Parameters

a. Height: ft. b. Diameter: ft.

c. Flow Rate: ACFM d. Temperature: °F

e. Velocity: FPS

E. Describe the control and treatment technology available (As many types as applicable, use additional pages if necessary).

1.

a. Control Device: Cyclone/Baghouse/Hepa Filter combination

b. Operating Principles: Cyclone/Baghouse removes approx 99.6% by weight followed by very efficient HEPA filters

c. Efficiency*: 99.97% @ .3 microns d. Capital Cost: $53,000

e. Useful Life: 10 yrs. f. Operating Cost: $1,500/yr

g. Energy*: 13.5 KWH h. Maintenance Cost: 2,500/yr

i. Availability of construction materials and process chemicals: materials readily available

j. Applicability to manufacturing processes: acceptable method of removing particulates from manufacturing Process with minimal interference

k. Ability to construct with control device, install in available space, and operate within proposed levels: New control system shall be installed and operate within compliance at minimal disruption to system/process.

2.

a. Control Device:

b. Operating Principles:

c. Efficiency*: d. Capital Cost:

e. Useful Life: f. Operating Cost:

g. Energy**: h. Maintenance Costs:

i. Availability of construction materials and process chemicals:

j. Applicability to manufacturing processes:

k. Ability to construct with control device, install in available space, and operate within proposed levels:

*Explain method of determining efficiency. manufacture data

**Energy to be reported in units of electrical power – KWH design rate.

3.

a. Control Device:

b. Operating Principles:

c. Efficiency*: d. Capital Cost:

e. Life: f. Operating Cost:

g. Energy: h. Maintenance Cost:

*Explain method of determining efficiency above.

i. Availability of construction materials and process chemicals:

j. Applicability to manufacturing processes:

k. Ability to construct with control device, install in available space and operate within proposed levels:

4.

a. Control Device

b. Operating Principles:

c. Efficiency*:

d. Capital Cost:

e. Life:

f. Operating Cost:

g. Energy:

h. Maintenance Cost:

i. Availability of construction materials and process chemicals:

j. Applicability to manufacturing processes:

k. Ability to construct with control device, install in available space, and operate within proposed levels:

F. Describe the control technology selected:

1. Control Device: Cyclone/Baghouse/HEPA Filter combination
2. Efficiency*: 99.97% @ .3 microns
3. Capital Cost: $53,000
4. Life: 10 yrs.
5. Operating Cost: 1,500/yr.
6. Energy: 13.5 KWH
7. Maintenance Cost: 2,500
8. Manufacturer: Sternvent/Farr Co.
9. Other locations where employed on similar processes:

a.

(1) Company: Martin Marietta Aerospace
(2) Mailing Address: P.O. Bx 5837 (MP-124)
(3) City: Orlando
(4) State: FL
(5) Environmental Manager: Ray Green
(6) Telephone No.: (305) 356-4286

*Explain method of determining efficiency above.

(7) Emissions*:

Contaminant	Rate or Concentration
Ablative-type dust/particulates	99.97% eff

(8) Process Rate*: N/A

b.

(1) Company:

(2) Mailing Address:

(3) City:

(4) State:

*Applicant must provide this information when available. Should this information not be available, applicant must state the reason(s) why.

(5) Environmental Manager:

(6) Telephone No.:

(7) Emissions*:

Contaminant	Rate or Concentration

(8) Process Rate*:

10. Reason for selection and description of systems:

The combination cyclone/baghouse/HEPA filters is recognized by industry as an acceptable and efficient solution for the removal of particulates in exhaust systems. The cyclone baghouse combination acts as an efficient PRC filter whereby 99.6% by weight are removed. The exhaust stream then flows through a series of 4 HEPA filters which trap and remove 99.97% particles .3 microws and larger.

*Applicant must provide this information when available. Should this information not be available, applicant must state the reason(s) why.

SECTION VII – PREVENTION OF SIGNIFICANT DETERIORATION

NOT APPLICABLE

A. Company Monitored Data

1. _____ no sites _____ TSP _____ ( ) SO^2* _____ Wind spd/dir

Period of monitoring ____/____/____ to ____/____/____
month day year month day year

Other data recorded _____

Attach all data or statistical summaries to this application.

2. Instrumentation, Field and Laboratory

a) Was instrumentation EPA referenced or its equivalent? _____ Yes _____ No

b) Was instrumentation calibrated in accordance with Department procedures? _____ Yes _____ No _____ Unknown

B. Meteorological Data Used for Air Quality Modeling

1. _____ Year(s) of data from ____/____/____ to ____/____/____
month day year month day year

2. Surface data obtained from (location) _____

3. Upper air (mixing height) data obtained from (location) _____

4. Stability wind rose (STAR) data obtained from (location) _____

C. Computer Models Used

1. _____ Modified? If yes, attach description.

2. _____ Modified? If yes, attach description.

3. _____ Modified? If yes, attach description.

4. _____ Modified? If yes, attach description.

Attach copies of all final model runs showing input data, receptor locations, and principle output tables.

D. Applicants Maximum Allowable Emission Data

Pollutant	Emission Rate
TSP	_____ grams/sec
SO^2	_____ grams/sec

E. Emission Data Used in Modeling

Attach list of emission sources. Emission data required is source name, description on point source (on NEDS point number), UTM coordinates, stack data, allowable emissions, and normal operating time.

F. Attach all other information supportive to the PSD review.

*Specify bubbler (B) or continuous (C).

G. Discuss the social and economic impact of the selected technology versus other applicable technologies (i.e., jobs, payroll, production, taxes, energy, etc.). Include assessment of the environmental impact of the sources.

H. Attach scientific, engineering, and technical material, reports, publications, journals, and other competent relevant information describing the theory and application of the requested best available control technology.

MARTIN MARIETTA AEROSPACE

ORLANDO AEROSPACE
POST OFFICE BOX 5837
ORLANDO, FLORIDA 32855
TELEPHONE (305) 352-5788

WALTER O. LOWRIE
PRESIDENT

5 January 1983

Mr. Alex Senkevich
District Manager
State of Florida, Department
of Environmental Regulation
St. Johns River District
3319 Maguire Boulevard
Orlando, Florida 32803

Dear Mr. Senkevich:

This letter is to certify that Richard C. Winfield, Director of Facilities, is the authorized Pollution Control Representative for Martin Marietta Orlando Aerospace. As Pollution Control Representative, Mr. Winfield is authorized to execute all environmental permit applications required by Chapter 403 of the Florida Statutes on behalf of the Corporation.

Very truly yours,

Walter O. Lowrie

Walter O. Lowrie
President

WOL/jc

State of Florida

Department of State

I certify from the records of this office that MARTIN-MARIETTA CORPORATION, a Maryland corporation, is authorized to transact business within the State of Florida, qualified on October 13, 1961.

The charter number for this corporation is 815678.

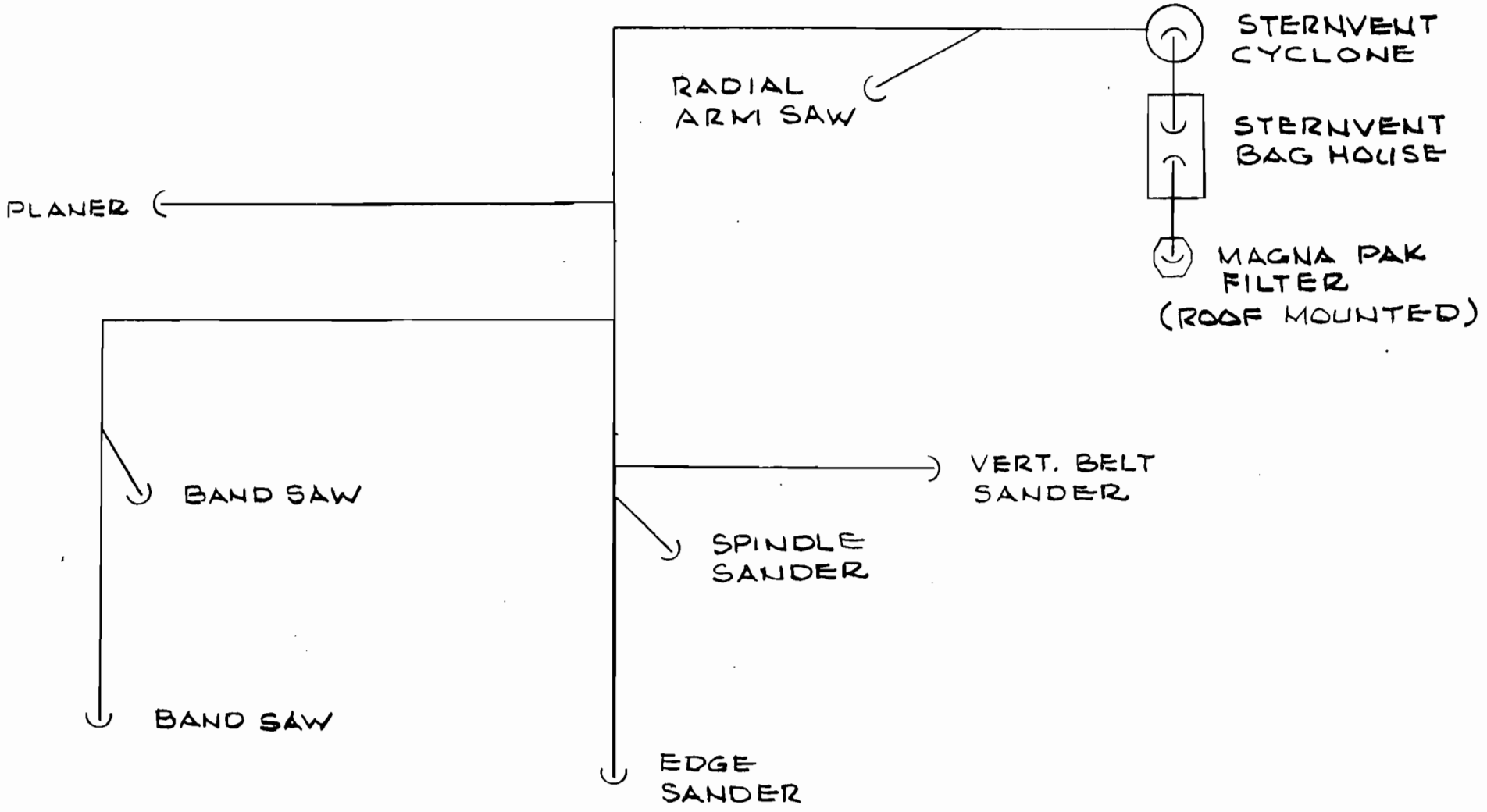
I further certify that said corporation has filed all annual reports and paid all annual report filing fees due this office through December 31, 1983, and its status is active.

Given under my hand and the
Great Seal of the State of Florida,
at Tallahassee, the Capital, this the
8th day of February, 1984.

George Firestone
Secretary of State

CER-101

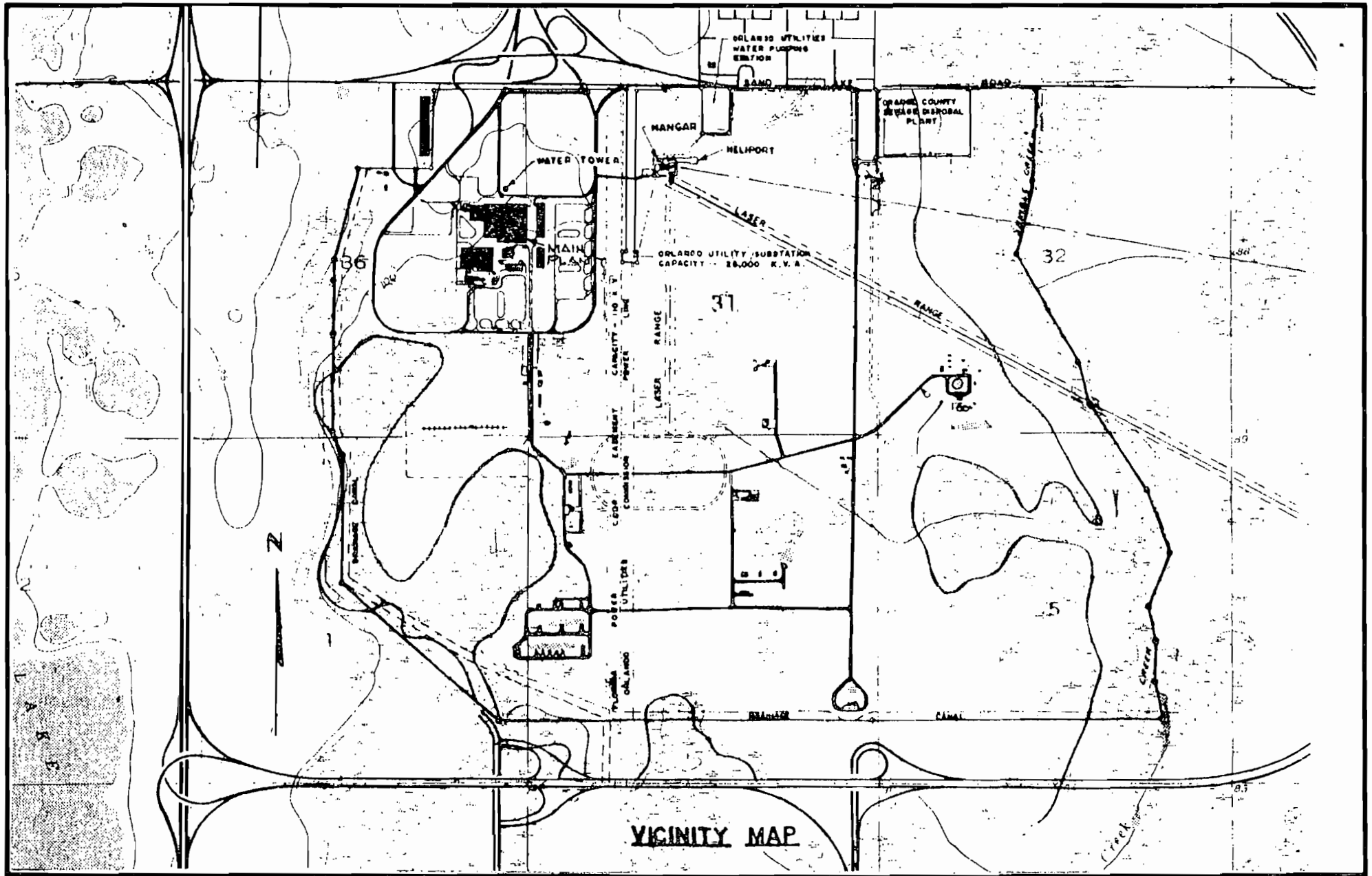
Form No. D 512-A Sep 79



SIZE	WORK SHEET – SKETCH	TITLE:	FACILITIES ENGINEERING
A	DESIGNED BY / DRAWN BY	DUST COLLECTOR UNIT NO. 6	MARTIN MARIETTA AEROSPACE ORLANDO DIVISION
	SKETCH NO. 1		

33912

Form No. D 512-A Sep 79



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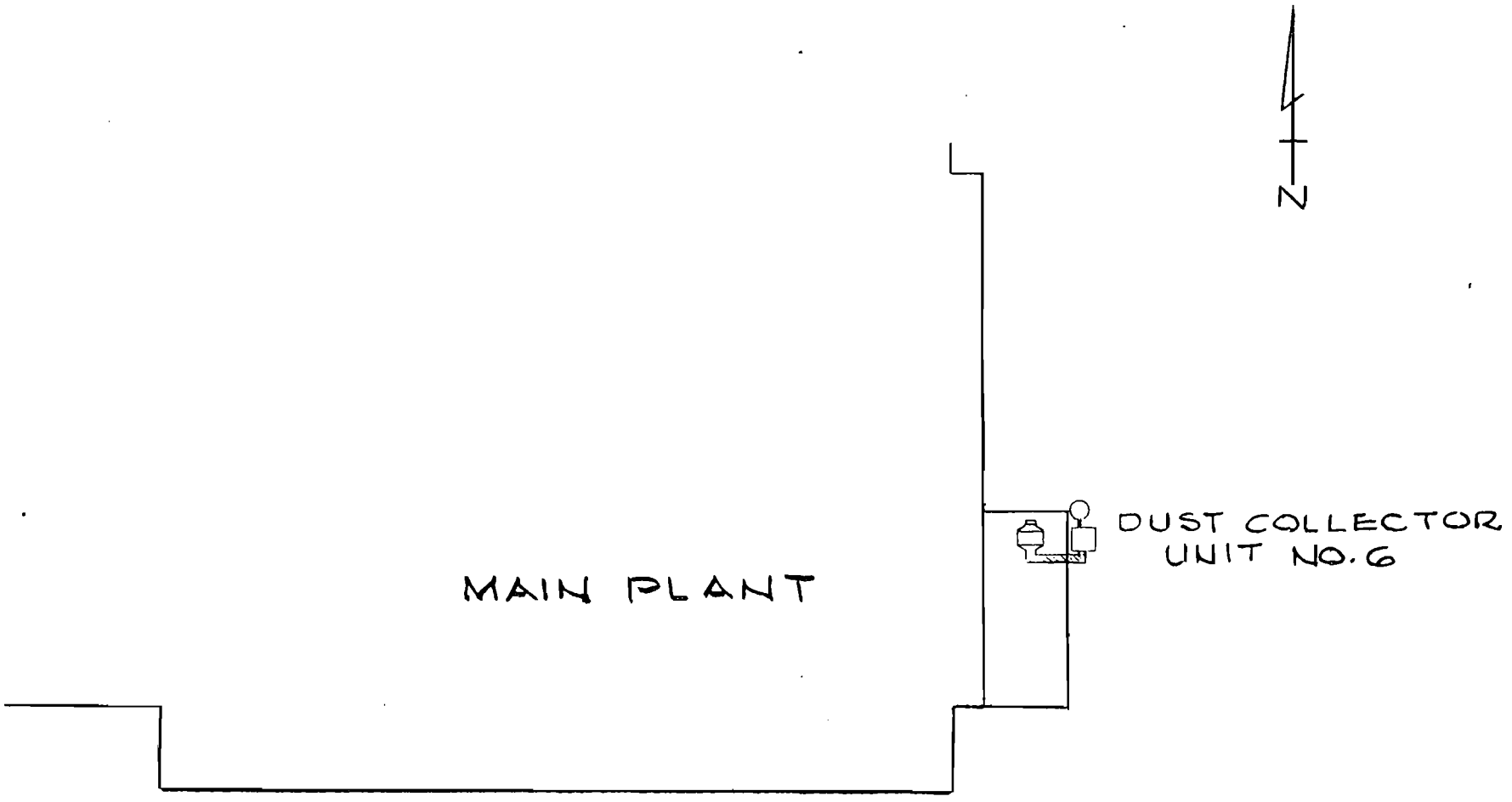
A	DESIGNED BY / DRAWN BY	MARTIN MARIETTA SITE PLAN	MARTIN MARIETTA AEROSPACE ORLANDO DIVISION
	SKETCH NO. 2		

Form No. D-512-A Sep 79



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	SKETCH NO. 3		