#### P 832 538 774

## **Certified Mail Receipt**

No Insurance Coverage Provided Do not use for International Mail

Mr. John R. Steiner, HS Street & No. P. O. Box 883
P.O., State & ZIP Code Melbourne, FL 32902-0883 Postage \$ Certified Fee Special Delivery Fee Restricted Delivery Fee Return Receipt Showing to Whom & Date Delivered Return Receipt Showing to Whom, Date, & Address of Delivery TOTAL Postage PS Form 3800, Postmark or Date 2-18-92 Mailed: Permit: AC 05-202415 -203985, -205848 & -49

SENDER:		<del>-</del>
<ul> <li>Complete items 1 and/or 2 for additional services.</li> <li>Complete items 3, &amp;n 1 4a &amp;,b.</li> <li>Print your name and &amp;ddress on the reverse of this form so that we can return this card to you.</li> </ul>		I also wish to receive the following services (for an extra fee):
<ul> <li>Attach this form to the front of the mailpiece, or the back if space does not permit.</li> <li>Write "Return Receipt Requested" on the mailpiece the article number.</li> </ul>	on the	1. Addressee's Address
the article number.		
3. Article Addressed to:	T45 A	Consult postmaster for fee.
Mr. John R. Steiner		cie Number
Dir of For a page	P 83	2 538 774
Dir. of Fac. & Enf. Affairs	4b. Serv	rice Type
Harris Semiconductor	Registered Insured	
P. O. Box 883	🛛 Certif	ied 🗆 COD
Melbourne, FL 32902-0883	☐ Expre	ss Mail Return Receipt for
	7. Date	of Delivery
5. Signature (Addressee)		2-20-97
Housis Semisarduta 6. Signature (Agent)	8. Addre	ssee's Address (Only if requested e is paid)
Lillia + Sac		
PS Form <b>3811</b> , October 1990		
± U.S. GPO: 1990—273-86	1 DO	MESTIC DETURN

DOMESTIC RETURN RECEIPT

### STATE OF FLORIDA DEPARTMENT OF ENVIRONMENTAL REGULATION NOTICE OF PERMIT

In the matter of an Application for Permit by:

DER File Nos. AC 05-202415

AC 05-203985 AC 05-205848

Mr.John R. Steiner Director of Facilities and Environmental Affairs

AC 05-205849

Harris Semiconductor

Post Office Box 883

Brevard County

Melbourne, Florida 32902-0883

Enclosed are Permit Numbers AC 05-202415, -203985, -205848, and -205849 to modify Buildings 54, 55, 57 and 59 at the Harris Semiconductor facility in Palm Bay, Brevard County, Florida. These permits are issued pursuant to Section(s) 403, Florida Statutes.

Any party to this Order (permit) 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 32399-2400; and by filing a copy of the Notice of Appeal accompanied by the applicable filing fees with the appropriate District Court of Appeal. The Notice of Appeal must be filed within 30 days from the date this Notice is filed with the Clerk of the Department.

Executed in Tallahassee, Florida.

STATE OF FLORIDA DEPARTMENT OF ENVIRONMENTAL REGULATION

C. H. Fancy, P.E., Chief Bureau of Air Regulation 2600 Blair Stone Road Tallahassee, FL 32399-2400 904-488-1344

#### CERTIFICATE OF SERVICE

The undersigned duly designated deputy agency clerk hereby certifies that this NOTICE OF PERMIT and all copies were mailed before the close of business on  $\frac{2/18/92}{}$  to the listed persons.

Clerk Stamp

FILING AND ACKNOWLEDGMENT FILED, on this date, pursuant to \$120.52(11), Florida Statutes, with the designated Department Clerk, receipt of which is hereby acknowledged

Copies furnished to:

C. Collins, Central District

C. Triantafyllidis, HS

S. McClarty, P.E., HS

#### Final Determination

Harris Semiconductor Brevard County City of Palm Bay, Florida

Construction Permit Nos.

AC 05-202415

AC 05-203985

AC 05-205848

AC 05-205849

Department of Environmental Regulation Division of Air Resources Management Bureau of Air Regulation

#### Final Determination

The construction permit application packages have been reviewed by the Department. Public Notice of the Department's Intent to Issue was published in The Tribune on January 21, 1992. The Technical Evaluation and Preliminary Determination was distributed on January 10, 1992, and available for public inspection at the Department's Central District office and the Department's Bureau of Air Regulation office.

A comment was received via a telephone call from Mr. Constantine Triantafyllidis (Harris Semiconductor) during the public notice period. He noted a typographical error in the VOC allowable emissions for the source/Building 57 in permit No. AC 05-205848, Specific Condition #1, which should have read 3.0 TPY instead of 2.0 TPY. The error has been corrected. Therefore, it is recommended that the construction permits be issued as drafted and as corrected.



## Florida Department of Environmental Regulation

Twin Towers Office Bldg. • 2600 Blair Stone Road • Tallahassee, Florida 32399-2400 Lawton Chiles, Governor Carol M. Browner, Secretary

Permittee:
Harris Semiconductor
P. O. Box 883
Melbourne, FL 32902-0883

Permit Number: AC 05-203985 Expiration Date: July 31, 1992 County: Brevard

Latitude/Longitude: 28°01'20"N 80°36'10"W

Project: Building 54 Modification

This permit is issued under the provisions of Chapter 403, Florida Statutes, Florida Administrative Code (F.A.C.) Chapters 17-2 and 17-4, and 40 CFR (July, 1990 version). The above named permittee is hereby authorized to perform the work or operate the facility shown on the application and approved drawings, plans, and other documents attached hereto or on file with the Department and made a part hereof and specifically described as follows:

For the modification of Building 54, which is an existing source that utilizes hood type work stations for the manufacture of semiconductors, to permit a decrease in the potential acid and the potential/allowable VOC (volatile organic compounds/organic solvents) emissions. The scrubber control systems are:

- o F54SO1: a Beverly Pacific 50,000 scfm (43,141 acfm) horizontal cross-flow wet scrubber, using polypropylene packing, and with a PVC mist eliminator, for VOC and acid vapor removal; Model No. PS-50HT;
- o F54SO2: a Harrington 17,000 scfm (16,000 acfm) horizontal cross-flow wet scrubber, using PVC packing, and with a PVC mist eliminator, for VOC and acid vapor removal; Model No. ECH 66-9PBS; and,
- o F54SO3: a Beverly Pacific 30,000 scfm (29,000 acfm) horizontal cross-flow wet scrubber, using polypropylene packing, and with a PVC mist eliminator, for VOC and acid vapor removal; Model No. PS-24HT.

The building/source is located at the permittee's existing facility located on Palm Bay Road in the City of Palm Bay. The UTM coordinates are Zone 17, 538.7 km East and 3100.9 km North.

The Source Classification Codes are: Major Group 36 o Cold Solvent Cleaning/ 4-01-003-99 Tons VOC/solvent Stripping Consumed

The source shall be constructed in accordance with the permit application, plans, documents, amendments and drawings, except as otherwise noted in the General and Specific Conditions.

#### Attachments are listed below:

- 1. Application to Construct/Modify Air Pollution Sources, DER Form 17-2.202(1), received October 24, 1991.
- 2. Technical Evaluation and Preliminary Determination dated January 10, 1992.



Permit Number: AC 05-203985
Expiration Date: July 31, 1992

#### GENERAL CONDITIONS:

- 1. The terms, conditions, requirements, limitations, and restrictions set forth in this permit are "Permit Conditions" and are binding and enforceable pursuant to Sections 403.161, 403.727, or 403.859 through 403.861, Florida Statutes. The permittee is placed on notice that the Department will review this permit periodically and may initiate enforcement action for any violation of these conditions.
- 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. Neither 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 is not 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, or plant life, or property caused by the construction or operation of this permitted source, or from penalties therefore; 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.
- 6. The permittee shall 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.

Permit Number: AC 05-203985 Expiration Date: July 31, 1992

#### GENERAL CONDITIONS:

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 and at a reasonable time, access to the premises, where the permitted activity is located or conducted to:

- a. Have access to and copy any records that must be kept under the conditions of the permit;
- b. Inspect the facility, equipment, practices, or operations regulated or required under this permit; and,
- c. Sample or monitor 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 provide the Department with the following information:
  - a. a description of and cause of non-compliance; and,
  - b. the period of noncompliance, including dates and times; or, if not corrected, the anticipated time the non-compliance is expected to continue, and steps being taken to reduce, eliminate, and prevent recurrence of the non-compliance.

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 for 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 involving the permitted source arising under the Florida Statutes or Department rules, except where such use is prescribed by Sections 403.73 and 403.111, Florida Statutes. Such evidence shall only be used to the extent it is consistent with the Florida Rules of Civil Procedure and appropriate evidentiary rules.

Permit Number: AC 05-203985 Expiration Date: July 31, 1992

#### GENERAL CONDITIONS:

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 17-4.120 and 17-30.300, F.A.C., 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 or a copy thereof shall be kept at the work site of the permitted activity.
- 13. The permittee shall comply with the following:
  - a. Upon request, the permittee shall furnish all records and plans required under Department rules. During enforcement actions, the retention period for all records will be extended automatically unless otherwise stipulated by the Department;
  - b. The permittee shall hold 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) required by the permit, copies of all reports required by this permit, and records of all data used to complete the application for this permit. These materials shall be retained at least three years from the date of the sample, measurement, report, or application unless otherwise specified by Department rule; and,
  - 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 dates analyses were performed;
    - the person responsible for performing the analyses;
    - the analytical techniques or methods used; and,
    - the results of such analyses.

Permit Number: AC 05-203985 Expiration Date: July 31, 1992

#### GENERAL CONDITIONS:

14. 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 corrected promptly.

- 1. The maximum allowable VOC (volatile organic compounds/organic solvents) emissions from Building No. 54 is 73.8 tons per year.
- 2. The VOC vapor and acid gas exhaust scrubber systems must be operating properly during the working hours.
- 3. Continuous operation shall be allowed (i.e., 8760 hours per year).
- 4. Objectionable odors shall not be allowed off plant property pursuant to F.A.C. Rule 17-2.620(2).
- 5. An inspection and maintenance plan shall be submitted to the DER's Central District office as part of the operating permit application. The plan shall include provisions for the prevention and correction of VOC losses from leaks and equipment malfunctions.
- 6. By March 31 of each calendar year, an annual operating report shall be submitted to the DER's Central District office demonstrating compliance with the VOC emissions limit for Building 54.
- 7. Each scrubber system's efficiency and actual VOC emissions shall be established by a sampling and analysis program, which includes:
  - a) a sample shall be taken annually from each scrubber stack and analyzed using EPA Method 25A, pursuant to F.A.C. Rule 17-2.700 and 40 CFR 60, Appendix A;
  - b) the DER's Central District office shall receive at least 15 days notice in writing prior to sampling;
  - c) the report, summarizing the sampling results, shall be submitted to the DER's Central District office within 45 days after the last test run is completed;
  - d) the efficiency of each control system shall be established by tests (inlet and outlet) once every five years for operation permit renewal; and,

Permit Number: AC 05-203985 Expiration Date: July 31, 1992

- e) the annual VOC emissions shall be calculated using actual emissions data derived from stack test sampling results and the actual operating hours for the affected source/building.
- 8. This permit will supercede all other permits previously issued on this source/Building No. 54.
- 9. The source/Building No. 54 is subject to all applicable provisions of F.A.C. Chapters 17-2 and 17-4 and 40 CFR (July, 1990 version).
- 10. Projected potential acid emissions are 9.7 TPY.
- 11. Building No. 54 is subject to the applicable provisions of F.A.C. Rules 17-2.240: Circumvention; 17-2.250: Excess Emissions; and, 17-4.130: Plant Operation Problems.
- 12. Any modification pursuant to F.A.C. Rule 17-2.100, Definitions-Modification, shall be submitted to the DER's Central District office and Bureau of Air Regulation (BAR) office for approval.
- 13. The permittee, for good cause, may request that this construction permit be extended. Such a request shall be submitted to the DER's BAR prior to 60 days before the expiration of the permit (F.A.C. Rule 17-4.090).
- 14. An application for an operation permit must be submitted to the DER's Central District office at least 90 days prior to the expiration date of this construction permit. To properly apply for an operation permit, the applicant shall submit the appropriate application form, fee, certification that construction was completed noting any deviations from the conditions in the construction permit, and compliance test reports as required by this permit (F.A.C. Rules 17-4.055 and 17-4.220).

Permit Number: AC 05-203985 Expiration Date: July 31, 1992

SPECIFIC CONDITIONS:

Issued this 17<sup>th</sup> day of February, 1992

STATE OF FLORIDA DEPARTMENT OF ENVIRONMENTAL REGULATION

STEVE SMALLWOOD, P.E., Director

Division of Air Resources

Management



## Florida Department of Environmental Regulation

Twin Towers Office Bldg. ● 2600 Blair Stone Road ● Tallahassee, Florida 32399-2400 Lawton Chiles, Governor

Carol M. Browner, Secretary

Permittee: Harris Semiconductor P. O. Box 883 Melbourne, FL 32902-0883 Permit Number: AC 05-202415 Expiration Date: July 31, 1992

County: Brevard

Latitude/Longitude: 28°01'20"N

80°36'10"W

Project: Building 55 Modification

This permit is issued under the provisions of Chapter 403, Florida Statutes, Florida Administrative Code (F.A.C.) Chapters 17-2 and 17-4, and 40 CFR (July, 1990 version). The above named permittee is hereby authorized to perform the work or operate the facility shown on the application and approved drawings, plans, and other documents attached hereto or on file with the Department and made a part hereof and specifically described as follows:

For the modification of Building 55, which is an existing source for the collection, short term storage, and shipping point for waste chemicals from the facility, to permit an increase in the potential/ VOC (volatile organic compounds/organic emissions. The scrubber control system is:

a Tri-Mer Corp. 9,500 scfm (7,500 acfm) horizontal o F55S01: counter-flow wet scrubber, using a polypropylene filter pack, and with a mist eliminator, for VOC and acid vapor removal; Model No. F/W 3.

The building/source is located at the permittee's existing facility located on Palm Bay Road in the City of Palm Bay. coordinates are Zone 17, 538.7 km East and 3100.9 km North.

The Source Classification Codes are: Major Group 36 Tons VOC/solvent o Cold Solvent Cleaning/ 4-01-003-99 Stripping Consumed

The source shall be constructed in accordance with the permit application, plans, documents, amendments and drawings, except as otherwise noted in the General and Specific Conditions.

#### Attachments are listed below:

- 1. Application to Construct/Modify Air Pollution Sources, DER Form 17-2.202(1), received October 24, 1991.
- Technical Evaluation and Preliminary Determination dated January 10, 1992.

Permit Number: AC 05-202415 Expiration Date: July 31, 1992

#### GENERAL CONDITIONS:

- 1. The terms, conditions, requirements, limitations, and restrictions set forth in this permit are "Permit Conditions" and are binding and enforceable pursuant to Sections 403.161, 403.727, or 403.859 through 403.861, Florida Statutes. The permittee is placed on notice that the Department will review this permit periodically and may initiate enforcement action for any violation of these conditions.
- 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. Neither 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 is not 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, or plant life, or property caused by the construction or operation of this permitted source, or from penalties therefore; 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.
- 6. The permittee shall 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.

Permit Number: AC 05-202415 Expiration Date: July 31, 1992

#### GENERAL CONDITIONS:

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 and at a reasonable time, access to the premises, where the permitted activity is located or conducted to:

- a. Have access to and copy any records that must be kept under the conditions of the permit;
- b. Inspect the facility, equipment, practices, or operations regulated or required under this permit; and,
- c. Sample or monitor 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 provide the Department with the following information:
  - a. a description of and cause of non-compliance; and,
  - b. the period of noncompliance, including dates and times; or, if not corrected, the anticipated time the non-compliance is expected to continue, and steps being taken to reduce, eliminate, and prevent recurrence of the non-compliance.

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 for 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 involving the permitted source arising under the Florida Statutes or Department rules, except where such use is prescribed by Sections 403.73 and 403.111, Florida Statutes. Such evidence shall only be used to the extent it is consistent with the Florida Rules of Civil Procedure and appropriate evidentiary rules.

Permit Number: AC 05-202415 Expiration Date: July 31, 1992

#### GENERAL CONDITIONS:

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 17-4.120 and 17-30.300, F.A.C., 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 or a copy thereof shall be kept at the work site of the permitted activity.
- 13. The permittee shall comply with the following:
  - a. Upon request, the permittee shall furnish all records and plans required under Department rules. During enforcement actions, the retention period for all records will be extended automatically unless otherwise stipulated by the Department;
  - b. The permittee shall hold 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) required by the permit, copies of all reports required by this permit, and records of all data used to complete the application for this permit. These materials shall be retained at least three years from the date of the sample, measurement, report, or application unless otherwise specified by Department rule; and,
  - 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 dates analyses were performed;
    - the person responsible for performing the analyses;
    - the analytical techniques or methods used; and,
    - the results of such analyses.

Permit Number: AC 05-202415 Expiration Date: July 31, 1992

#### GENERAL CONDITIONS:

14. 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 corrected promptly.

- 1. The maximum allowable VOC (volatile organic compounds/organic solvents) emissions from Building No. 55 is 1.0 tons per year.
- 2. The VOC vapor and acid gas exhaust scrubber systems must be operating properly during the working hours.
- 3. Continuous operation shall be allowed (i.e., 8760 hours per year).
- 4. Objectionable odors shall not be allowed off plant property pursuant to F.A.C. Rule 17-2.620(2).
- 5. An inspection and maintenance plan shall be submitted to the DER's Central District office as part of the operating permit application. The plan shall include provisions for the prevention and correction of VOC losses from leaks and equipment malfunctions.
- 6. By March 31 of each calendar year, an annual operating report shall be submitted to the DER's Central District office demonstrating compliance with the VOC emissions limit for Building 55.
- 7. Each scrubber system's efficiency and actual VOC emissions shall be established by a sampling and analysis program, which includes:
  - a) a sample shall be taken annually from each scrubber stack and analyzed using EPA Method 25A, pursuant to F.A.C. Rule 17-2.700 and 40 CFR 60, Appendix A;
  - b) the DER's Central District office shall receive at least 15 days notice in writing prior to sampling;
  - c) the report, summarizing the sampling results, shall be submitted to the DER's Central District office within 45 days after the last test run is completed;
  - d) the efficiency of each control system shall be established by tests (inlet and outlet) once every five years for operation permit renewal; and,

Permit Number: AC 05-202415 Expiration Date: July 31, 1992

- e) the annual VOC emissions shall be calculated using actual emissions data derived from stack test sampling results and the actual operating hours for the affected source/building.
- 8. This permit will supercede all other permits previously issued on this source/Building No. 55.
- 9. The source/Building No. 55 is subject to all applicable provisions of F.A.C. Chapters 17-2 and 17-4 and 40 CFR (July, 1990 version).
- 10. Projected potential acid emissions are 0.1 TPY.
- 11. Building No. 55 is subject to the applicable provisions of F.A.C. Rules 17-2.240: Circumvention; 17-2.250: Excess Emissions; and, 17-4.130: Plant Operation Problems.
- 12. Any modification pursuant to F.A.C. Rule 17-2.100, Definitions-Modification, shall be submitted to the DER's Central District office and Bureau of Air Regulation (BAR) office for approval.
- 13. The permittee, for good cause, may request that this construction permit be extended. Such a request shall be submitted to the DER's BAR prior to 60 days before the expiration of the permit (F.A.C. Rule 17-4.090).
- 14. An application for an operation permit must be submitted to the DER's Central District office at least 90 days prior to the expiration date of this construction permit. To properly apply for an operation permit, the applicant shall submit the appropriate application form, fee, certification that construction was completed noting any deviations from the conditions in the construction permit, and compliance test reports as required by this permit (F.A.C. Rules 17-4.055 and 17-4.220).

Permit Number: AC 05-202415 Expiration Date: July 31, 1992

SPECIFIC CONDITIONS:

Issued this \_

STATE OF FLORIDA DEPARTMENT OF ENVIRONMENTAL REGULATION

STEVE SMALLWOOD, P.E., Director Division of Air Resources

Management



## Florida Department of Environmental Regulation

Twin Towers Office Bldg. • 2600 Blair Stone Road • Tallahassee, Florida 32399-2400 Lawton Chiles, Governor Carol M. Browner, Secretary

Permittee:
Harris Semiconductor
P. O. Box 883
Melbourne, FL 32902-0883

Permit Number: AC 05-205848 Expiration Date: July 31, 1992

County: Brevard

Latitude/Longitude: 28°01'20"N 80°36'10"W

Project: Building 57 Modification

This permit is issued under the provisions of Chapter 403, Florida Statutes, Florida Administrative Code (F.A.C.) Chapters 17-2 and 17-4, and 40 CFR (July, 1990 version). The above named permittee is hereby authorized to perform the work or operate the facility shown on the application and approved drawings, plans, and other documents attached hereto or on file with the Department and made a part hereof and specifically described as follows:

For the modification of Building 57, which is an existing source whose primary manufacturing operations are soldering and plating of integrated circuit parts, to permit an increase in the potential/allowable VOC (volatile organic compounds/organic solvents) emissions. The scrubber control system is:

o F57SO1: a Tri-Mer Corp. 13,500 scfm (9,328 acfm) horizontal counter-flow wet scrubber, using a polypropylene filter pack, and with a mist eliminator, for VOC and acid vapor removal; Model No. F/W 5.

The building/source is located at the permittee's existing facility located on Palm Bay Road in the City of Palm Bay. The UTM coordinates are Zone 17, 538.7 km East and 3100.9 km North.

The Source Classification Codes are: Major Group 36 o Cold Solvent Cleaning/ 4-01-003-99 Tons VOC/solvent Stripping Consumed

The source shall be constructed in accordance with the permit application, plans, documents, amendments and drawings, except as otherwise noted in the General and Specific Conditions.

#### Attachments are listed below:

- 1. Application to Construct/Modify Air Pollution Sources, DER Form 17-2.202(1), received October 24, 1991.
- 2. Technical Evaluation and Preliminary Determination dated January 10, 1992.

Permit Number: AC 05-205848
Expiration Date: July 31, 1992

#### GENERAL CONDITIONS:

- 1. The terms, conditions, requirements, limitations, and restrictions set forth in this permit are "Permit Conditions" and are binding and enforceable pursuant to Sections 403.161, 403.727, or 403.859 through 403.861, Florida Statutes. The permittee is placed on notice that the Department will review this permit periodically and may initiate enforcement action for any violation of these conditions.
- 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. Neither 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 is not 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, or plant life, or property caused by the construction or operation of this permitted source, or from penalties therefore; 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.
- 6. The permittee shall 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.

Permit Number: AC 05-205848
Expiration Date: July 31, 1992

#### GENERAL CONDITIONS:

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 and at a reasonable time, access to the premises, where the permitted activity is located or conducted to:

- a. Have access to and copy any records that must be kept under the conditions of the permit;
- b. Inspect the facility, equipment, practices, or operations regulated or required under this permit; and,
- c. Sample or monitor 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 provide the Department with the following information:
  - a. a description of and cause of non-compliance; and,
  - b. the period of noncompliance, including dates and times; or, if not corrected, the anticipated time the non-compliance is expected to continue, and steps being taken to reduce, eliminate, and prevent recurrence of the non-compliance.

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 for 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 involving the permitted source arising under the Florida Statutes or Department rules, except where such use is prescribed by Sections 403.73 and 403.111, Florida Statutes. Such evidence shall only be used to the extent it is consistent with the Florida Rules of Civil Procedure and appropriate evidentiary rules.

1

Permit Number: AC 05-205848 Expiration Date: July 31, 1992

#### GENERAL CONDITIONS:

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 17-4.120 and 17-30.300, F.A.C., 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 or a copy thereof shall be kept at the work site of the permitted activity.
- 13. The permittee shall comply with the following:
  - a. Upon request, the permittee shall furnish all records and plans required under Department rules. During enforcement actions, the retention period for all records will be extended automatically unless otherwise stipulated by the Department;
  - b. The permittee shall hold 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) required by the permit, copies of all reports required by this permit, and records of all data used to complete the application for this permit. These materials shall be retained at least three years from the date of the sample, measurement, report, or application unless otherwise specified by Department rule; and,
  - 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 dates analyses were performed;
    - the person responsible for performing the analyses;
    - the analytical techniques or methods used; and,
    - the results of such analyses.

Permit Number: AC 05-205848 Expiration Date: July 31, 1992

#### GENERAL CONDITIONS:

14. 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 corrected promptly.

- 1. The maximum allowable VOC (volatile organic compounds/organic solvents) emissions from Building No. 57 is 3.0 tons per year.
- 2. The VOC vapor and acid gas exhaust scrubber systems must be operating properly during the working hours.
- 3. Continuous operation shall be allowed (i.e., 8760 hours per year).
- 4. Objectionable odors shall not be allowed off plant property pursuant to F.A.C. Rule 17-2.620(2).
- 5. An inspection and maintenance plan shall be submitted to the DER's Central District office as part of the operating permit application. The plan shall include provisions for the prevention and correction of VOC losses from leaks and equipment malfunctions.
- 6. By March 31 of each calendar year, an annual operating report shall be submitted to the DER's Central District office demonstrating compliance with the VOC emissions limit for Building 57.
- 7. Each scrubber system's efficiency and actual VOC emissions shall be established by a sampling and analysis program, which includes:
  - a) a sample shall be taken annually from each scrubber stack and analyzed using EPA Method 25A, pursuant to F.A.C. Rule 17-2.700 and 40 CFR 60, Appendix A;
  - b) the DER's Central District office shall receive at least 15 days notice in writing prior to sampling;
  - c) the report, summarizing the sampling results, shall be submitted to the DER's Central District office within 45 days after the last test run is completed;
  - d) the efficiency of each control system shall be established by tests (inlet and outlet) once every five years for operation permit renewal; and,

Permit Number: AC 05-205848 Expiration Date: July 31, 1992

- e) the annual VOC emissions shall be calculated using actual emissions data derived from stack test sampling results and the actual operating hours for the affected source/building.
- 8. This permit will supercede all other permits previously issued on this source/Building No. 57.
- 9. The source/Building No. 57 is subject to all applicable provisions of F.A.C. Chapters 17-2 and 17-4 and 40 CFR (July, 1990 version).
- 10. Projected potential acid emissions are 0.2 TPY.
- 11. Building No. 57 is subject to the applicable provisions of F.A.C. Rules 17-2.240: Circumvention; 17-2.250: Excess Emissions; and, 17-4.130: Plant Operation Problems.
- 12. Any modification pursuant to F.A.C. Rule 17-2.100, Definitions-Modification, shall be submitted to the DER's Central District office and Bureau of Air Regulation (BAR) office for approval.
- 13. The permittee, for good cause, may request that this construction permit be extended. Such a request shall be submitted to the DER's BAR prior to 60 days before the expiration of the permit (F.A.C. Rule 17-4.090).
- 14. An application for an operation permit must be submitted to the DER's Central District office at least 90 days prior to the expiration date of this construction permit. To properly apply for an operation permit, the applicant shall submit the appropriate application form, fee, certification that construction was completed noting any deviations from the conditions in the construction permit, and compliance test reports as required by this permit (F.A.C. Rules 17-4.055 and 17-4.220).

Permit Number: AC 05-205848 Expiration Date: July 31, 1992

SPECIFIC CONDITIONS:

Issued this 17th of February

STATE OF FLORIDA DEPARTMENT OF ENVIRONMENTAL REGULATION

STEVE SMALLWOOD, P.E., Director Division of Air Resources

Management



## Florida Department of Environmental Regulation

Twin Towers Office Bldg. ● 2600 Blair Stone Road ● Tallahassee, Florida 32399-2400 Carol M. Browner, Secretary Lawton Chiles, Governor

Permittee: Harris Semiconductor P. O. Box 883 Melbourne, FL 32902-0883

Permit Number: AC 05-205849 Expiration Date: July 31, 1992

County: Brevard

Latitude/Longitude: 28°01'20"N

80°36'10"W

Project: Building 59 Modification

This permit is issued under the provisions of Chapter 403, Florida Statutes, Florida Administrative Code (F.A.C.) Chapters 17-2 and 17-4, and 40 CFR (July, 1990 version). The above named permittee is hereby authorized to perform the work or operate the facility shown on the application and approved drawings, plans, and other documents attached hereto or on file with the Department and made a part hereof and specifically described as follows:

For the modification of Building 59, which is an existing source used for the manufacture of semiconductors, to permit an increase in the potential acid emissions. The scrubber control and exhaust systems are:

#### Reliability Shop:

- a Beverly Pacific 40,000 scfm (30,838 acfm) horizontal cross-flow wet scrubber, using polypropylene packing, PVC mist eliminator for acid vapor removal; Model No. PS-40HT;
- a Beverly Pacific 20,000 scfm (10,972 acfm) vertical o F59S02: counter-current wet scrubber, using polypropylene packing, with a PVC mist eliminator, for VOC (volatile organic compounds/organic solvents) vapor removal; Model No. PS-24VT; and,

Probe Card Repair Shop: o F59E04: an exhaust fan.

The building/source is located at the permittee's existing facility located on Palm Bay Road in the City of Palm Bay. coordinates are Zone 17, 538.7 km East and 3100.9 km North.

The Source Classification Codes are: Major Group 36 o Cold Solvent Cleaning/ 4-01-003-99 Tons VOC/solvent Stripping Consumed

The source shall be constructed in accordance with the permit application, plans, documents, amendments and drawings, except as otherwise noted in the General and Specific Conditions.

#### Attachments are listed below:

- 1. Application to Construct/Modify Air Pollution Sources, DER Form 17-2.202(1), received October 24, 1991.
- Technical Evaluation and Preliminary Determination dated January 10, 1992.

Permit Number: AC 05-205849
Expiration Date: July 31, 1992

#### GENERAL CONDITIONS:

- 1. The terms, conditions, requirements, limitations, and restrictions set forth in this permit are "Permit Conditions" and are binding and enforceable pursuant to Sections 403.161, 403.727, or 403.859 through 403.861, Florida Statutes. The permittee is placed on notice that the Department will review this permit periodically and may initiate enforcement action for any violation of these conditions.
- 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. Neither 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 is not 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, or plant life, or property caused by the construction or operation of this permitted source, or from penalties therefore; 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.
- 6. The permittee shall 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.

Permit Number: AC 05-205849
Expiration Date: July 31, 1992

#### GENERAL CONDITIONS:

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 and at a reasonable time, access to the premises, where the permitted activity is located or conducted to:

- a. Have access to and copy any records that must be kept under the conditions of the permit;
- Inspect the facility, equipment, practices, or operations regulated or required under this permit; and,
- c. Sample or monitor 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 provide the Department with the following information:
  - a. a description of and cause of non-compliance; and,
  - b. the period of noncompliance, including dates and times; or, if not corrected, the anticipated time the non-compliance is expected to continue, and steps being taken to reduce, eliminate, and prevent recurrence of the non-compliance.

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 for 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 involving the permitted source arising under the Florida Statutes or Department rules, except where such use is prescribed by Sections 403.73 and 403.111, Florida Statutes. Such evidence shall only be used to the extent it is consistent with the Florida Rules of Civil Procedure and appropriate evidentiary rules.

Permit Number: AC 05-205849
Expiration Date: July 31, 1992

#### GENERAL CONDITIONS:

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 17-4.120 and 17-30.300, F.A.C., 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 or a copy thereof shall be kept at the work site of the permitted activity.
- 13. The permittee shall comply with the following:
  - a. Upon request, the permittee shall furnish all records and plans required under Department rules. During enforcement actions, the retention period for all records will be extended automatically unless otherwise stipulated by the Department;
  - b. The permittee shall hold 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) required by the permit, copies of all reports required by this permit, and records of all data used to complete the application for this permit. These materials shall be retained at least three years from the date of the sample, measurement, report, or application unless otherwise specified by Department rule; and,
  - 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 dates analyses were performed;
    - the person responsible for performing the analyses;
    - the analytical techniques or methods used; and,
    - the results of such analyses.

PERMITTEE: Permit Number: AC 05-205849
Harris Semiconductor Expiration Date: July 31, 1992

#### GENERAL CONDITIONS:

14. 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 corrected promptly.

- 1. The maximum allowable VOC (volatile organic compounds/organic solvents) emissions from Building No. 59 is 8.4 tons per year.
- 2. The VOC vapor and acid gas exhaust scrubber systems must be operating properly during the working hours.
- 3. Continuous operation shall be allowed (i.e., 8760 hours per year).
- 4. Objectionable odors shall not be allowed off plant property pursuant to F.A.C. Rule 17-2.620(2).
- 5. An inspection and maintenance plan shall be submitted to the DER's Central District office as part of the operating permit application. The plan shall include provisions for the prevention and correction of VOC losses from leaks and equipment malfunctions.
- 6. By March 31 of each calendar year, an annual operating report shall be submitted to the DER's Central District office demonstrating compliance with the VOC emissions limit for Building 59.
- 7. Each scrubber system's efficiency and actual VOC emissions shall be established by a sampling and analysis program, which includes:
  - a) a sample shall be taken annually from each scrubber stack and analyzed using EPA Method 25A, pursuant to F.A.C. Rule 17-2.700 and 40 CFR 60, Appendix A;
  - b) the DER's Central District office shall receive at least 15 days notice in writing prior to sampling;
  - c) the report, summarizing the sampling results, shall be submitted to the DER's Central District office within 45 days after the last test run is completed;
  - d) the efficiency of each control system shall be established by tests (inlet and outlet) once every five years for operation permit renewal; and,

Permit Number: AC 05-205849 Expiration Date: July 31, 1992

- e) the annual VOC emissions shall be calculated using actual emissions data derived from stack test sampling results and the actual operating hours for the affected source/building.
- 8. This permit will supercede all other permits previously issued on this source/Building No. 59.
- 9. The source/Building No. 59 is subject to all applicable provisions of F.A.C. Chapters 17-2 and 17-4 and 40 CFR (July, 1990 version).
- 10. Projected potential acid emissions are 0.3 TPY.
- 11. Building No. 59 is subject to the applicable provisions of F.A.C. Rules 17-2.240: Circumvention; 17-2.250: Excess Emissions; and, 17-4.130: Plant Operation Problems.
- 12. Any modification pursuant to F.A.C. Rule 17-2.100, Definitions-Modification, shall be submitted to the DER's Central District office and Bureau of Air Regulation (BAR) office for approval.
- 13. The permittee, for good cause, may request that this construction permit be extended. Such a request shall be submitted to the DER's BAR prior to 60 days before the expiration of the permit (F.A.C. Rule 17-4.090).
- 14. An application for an operation permit must be submitted to the DER's Central District office at least 90 days prior to the expiration date of this construction permit. To properly apply for an operation permit, the applicant shall submit the appropriate application form, fee, certification that construction was completed noting any deviations from the conditions in the construction permit, and compliance test reports as required by this permit (F.A.C. Rules 17-4.055 and 17-4.220).

Permit Number: AC 05-205849 Expiration Date: July 31, 1992

SPECIFIC CONDITIONS:

Issued this 17th day of February, 1992

STATE OF FLORIDA DEPARTMENT OF ENVIRONMENTAL REGULATION

STEVE SMALLWOOD, P.E. Director

Division of Air Resources

Management



## State of Florida DEPARTMENT OF ENVIRONMENTAL REGULATION

For Routing To Other Than The Addressee		
To:	Location:	
To:	Location:	
To:	Location: Location:	
l	Oate:	

# Interoffice Memorandum

TO: Steve Smallwood

FROM: Clair Fancy

DATE: February 13, 1992

SUBJ: Approval of Construction Permits Nos. AC 05-202415

AC 05-203985 AC 05-205848 AC 05-205849

Harris Semiconductor

Attached for your approval and signature are construction permits for modifications prepared by the Bureau of Air Regulation for the above referenced company to allow an increase in VOC allowable emission (Bldgs. 55 & 57), an increase in potential acid emissions (Bldg. 59), and a decrease in VOC allowable and potential acid emissions. The facility is located in the city of Palm Bay, Brevard County, Florida. A comment was received during the public notice period regarding a typographical error in a permit (i.e., AC 05-205848: Bldg. 57), which has been corrected.

Day 90, after which these permits will be issued by default, is February 17, 1992.

I recommend your approval and signature.

CF/BM/rbm

## **Check Sheet**

Company Name: HARRIS SEMI CONDUCTOR	
Permit Number: Ac 05-203985, -207415, -205848, -205849	
PSD Number: /	
Permit Engineer:	_
Application:  Initial Application	
Intent:  Intent to Issue  Notice of Intent to Issue  Technical Evaluation  BACT Determination  Unsigned Permit  Correspondence with:  EPA  Park Services  Other  Proof of Publication  Petitions - (Related to extensions, hearings, etc.)	
Waiver of Department Action Other  Final Determination:	
Final Determination	
Signed Permit	
BACT Determination	
Other	
Post Permit Correspondence:  Extensions/Amendments/Modifications  Other	

## CAPE PUBLICATIONS, INC.

### The Times

THE TRIBUNE

Published Weekly on Wednesday

ished Weekly on Wednesday

JAN 2 3 1992

\fLORID/

Published Daily

Bureau of Air Regulation

STATE OF FLORIDA COUNTY OF BREVARD

Before the undersigned authority personally appeared Sandra N. Thomas _ who on
oath says that he/she isLegal Advertising Clerk
of the, a newspaper published in Brevard County,
Florida; that the attached copy of advertising being a
in the matter of
Harris Semiconductor
in the Court
was published in theFLORIDA TODAY NEWSPAPER
in the issues of January 21, 1992
Affiant further says that the said FLORIDA TODAY NEWSPAPER
is a newspaper published in said Brevard County, Florida and that the said newspaper has
heretofore been continuously published in said Brevard County, Florida regularly as stated above,
and has been entered as second class mail matter at the post office in
said Brevard County, Florida for a period of one year next preceeding the first publication of the
attached copy of advertisement; and affiant further says that he 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 said newspaper.

Sworn and subscribed to before me this

\_A.D., 1

OFFICIAL SEAL

ce; B. mitabell a. zahn, ellist

LEAH SMITH MY COMMISSION EXPIRES JUNE 07, 1992

#### ST☆R-ADVOCATE

Published Weekly on Wednesday

TO-109584-1T-1/21,1992,Tues

State of Florida Department of Environmental Regulation Notice of Intent to Issue
The Department of Environmental Regulation (Department) hereby gives notice of its intent to issue permits (AC 03-203985; Bidg. 54; AC 05-203415; Bidg. 55; AC 05-205849; Bidg. 57; and, AC 07-20583, Melbourne, Florida 32902-0833, The facility is located along Palm Bay. The project includes an increase in the potential-i/allowable volatile organic compounds/organic solvents (VOC) emissions for sources/Bidgs. 55
57, an increase in the potential acid emissions for sources/Bidgs. 55
57, an increase in the potential acid emissions for source/Bidg. 59, and a decrease in the potential acid emissions for source/Bidg. 54, Even though there will be a no net change in the facility's total potential pollutant emissions (o.e., VOC and acid), there will be a modification of the federally enforceable permit conditions currently applicable to each source. A determination of Best Available Control Technology (BACT) was not required. The Department is Issuing this Intent to Issue for the reasons stated in the Technical Evaluation and Preliminary Determination.

A person whose substantial interests are affected by the Department's proposed permitting decision may petition for an administrative proceeding (hearning) in accordance with section 120.57, Forida Statues (F.S.). The petition must contain the Information set forth below and must be filed (received) in the Office of General Counsel of the Department at 2600 Blair Stone Road, Tallahassee, Florida 22399-2400, within fourteen (14) days of publication of this notice. Petitioner shall mail a copy of the petition to the applicant's anem and administrative determination (hearing) under Section 120.57, F.S.

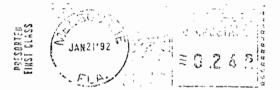
The Petition shall contain the following information:

(a) A statement of how each petitioner, it and administrative determination of the Department's action or proposed action;

(b

#### FLORIDA TODAY/USA TODAY

P.O. Box 363000 Melbourne, Florida 32936-3000



State of Florida Dept. of Environmental Regulation Bureau of Air Regulation 2600 Blair Stone Rd Tallahassee, Fl 32399-2400

Attn: C H Fancy, PE

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(f) A statement of which rules or statutes petitioner contends require reversal or modification of the Department's action or proposed action: and, (g) A statement, of the relief sought by petitioner, stating precisely the action petitioner wants the Department to take with respect to the Department's action or proposed action. If a petition is filed, the administrative hearing process is designed to formulate agency action. A ccordingly, the Department's final action may be different from the position taken by it in this Notice. Persons whose substantial interests will be affected by any decision of the Department with regard to the applications have the right to petition to become a party to the proceedings. The petition must conform to the requirements specified above and be filed (received) within 14 days of publication of this notice in the Office of General Counsel at the above address of the Department. Fallure to petition within the allowed time frame constitutes a waiver of any right such person has to request a hearing under Section 120.57, F.S., and to participate as a party to this proceeding. Any subsequent intervention will only be at the approval of the presiding officer upon motion filed pursuant to Rule 28-5.207. Florida Administrative Code.

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

Department of Environmental Regulation Bureau of Air Regulation 2600 Blair Stone Road Tallahassee, FL 32399-2400

Department of Environmental Regulation Central District 3319 Maguire Bivd., Suite 232 Orlando, FL 32803-3767

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

### P 832 538 761

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Certified Mail Receipt

No Insurance Coverage Provided
Do not use for International Mail

TELESTRICES
(See Reverse)

	POSTAL SERVICE (SEE NEVELSE)	_
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	Mr. John R. Steir	er, Harris
	Street & No. Semic	conductor
	P. O. Box 883	
	P.O., State & ZIP Code	
	Melbourne, FL 329	02-0883
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	Certified Fee	
	Special Delivery Fee	
	Restricted Delivery Fee	
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PS Form <b>3800</b> , June 1990	Return Receipt Showing to Whom, Date, & Address of Delivery	
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ñ	Mailed: 1-10-92	
E	Permit: AC 05-20	2415
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SENDER:		
<ul> <li>Complete items 1 and/or 2 for additional services.</li> <li>Complete items 3, and 4a &amp; b.</li> <li>Print your name and address on the reverse of this that we can return this card to you.</li> <li>Attach this form to the front of the mailpiece, or chack if space does not permit.</li> </ul>	I also wish to receive the following services (for an extra fee):  1.  Addressee's Address	
<ul> <li>Write "Return Receipt Requested" on the mailnier</li> </ul>	e next to	2. Restricted Delivery
the article number.	_	Consult postmaster for fee.
3. Article Addressed to:	4a. Arti	cle Number
Mr. John R. Steiner	P 8	32 538 761
Director Fo Facilities and	4b. Ser	vice Type
Environmental Affairs		stered
Harris Semiconductor	☐ Expr	SS Mail Return Receipt for Merchand se
P. O. Box 883	7. Date	of Dallary A
Melbourne, FL 32902-0883		山區 医免区区
5. Signature (Addressee) April Sandards	& Add and	esdee Address Driver requested
6. Signature (Agent)		CONTRACTOR OF THE PARTY OF THE
DC F 2011		



## Florida Department of Environmental Regulation

Twin Towers Office Bldg. • 2600 Blair Stone Road • Tallahassee, Florida 32399-2400 Lawton Chiles, Governor Carol M. Browner, Secretary

January 10, 1992

#### CERTIFIED MAIL-RETURN RECEIPT REQUESTED

Mr. John R. Steiner
Director of Facilities and Environmental Affairs
Harris Semiconductor
Post Office Box 883
Melbourne, Florida 32902-0883

Dear Mr. Steiner:

Attached is one copy of the Technical Evaluation and Preliminary Determination and proposed permits for Harris Semiconductor to modify its facility (i.e., Bldgs./sources 54, 55, 57 & 59), which includes an increase in the potential/allowable volatile organic compounds/organic solvents (VOC) emissions (55 & 57), an increase in the potential acid emissions (59), and a decrease in the potential/allowable VOC and the potential acid emissions (54). Even though there will be no net change in the facility's total potential pollutant emissions, there will be a modification of the federally enforceable permit conditions currently applicable to each source.

Please submit any written comments you wish to have considered concerning the Department's proposed action to Mr. Preston Lewis of the Bureau of Air Regulation.

Sincerely,

C. H. Fancy, P.E.

Chief

Bureau of Air Regulation

CHF/BM/rbm

#### Attachments

c: C. Collins, Central District

C. Triantafyllidis, HS

S. McClarty, P.E., HS

## BEFORE THE STATE OF FLORIDA DEPARTMENT OF ENVIRONMENTAL REGULATION

In the Matter of Application for Permits by:

Harris Semiconductor Post Office Box 883 Melbourne, Florida 32902-0883 DER File Nos. AC 05-202415 AC 05-203985 AC 05-205848 AC 05-205849

#### INTENT TO ISSUE

The Department of Environmental Regulation (Department) hereby gives notice of its intent to issue air construction permits (copies attached) for the proposed projects as detailed in the applications specified above. The Department is issuing this Intent to Issue for the reasons stated in the attached Technical Evaluation and Preliminary Determination.

The applicant, Harris Semiconductor, applied on October 24, 1991, to the Department for permits to increase the potential/allowable volatile organic compounds/organic solvents (VOC) emissions in sources/Bldgs. 55 and 57, to increase the potential acid emissions in source/Bldg. 59, and to decrease the potential/allowable VOC and the potential acid emissions in source/Bldg. 54. Even though there will be no net change in the facility's total potential pollutant emissions, there will be a modification of the federally enforceable permit conditions currently applicable to each source.

The Department has permitting jurisdiction under Chapter 403, Florida Statutes (F.S.), and Florida Administrative Code (F.A.C.) Chapters 17-2 and 17-4. The project is not exempt from permitting procedures. The Department has determined that air construction permits are required for the proposed work.

Pursuant to Section 403.815, F.S., and Department Rule 17-103.150, F.A.C., you (the applicant) are required to publish at your own expense the enclosed Notice of Intent to Issue Permits. The notice shall be published one time only within 30 days, in the legal

ad section of a newspaper of general circulation in the area affected. For the purpose of this rule, "publication in a newspaper of general circulation in the area affected" means publication in a newspaper meeting the requirements of Sections 50.011 and 50.031, F.S., in the county where the activity is to take place. Where there is more than one newspaper of general circulation in the county, the newspaper used must be the one with significant circulation in the area that may be affected by the permits. If you are uncertain that a newspaper meets these requirements, please contact the Department at the address or telephone number listed below. The applicant shall provide proof of publication to the Department's Bureau of Air Regulation, 2600 Blair Stone Road, Tallahassee, Florida 32399-2400 (904-488-1344), within seven days of publication. Failure to publish the notice and provide proof of publication within the allotted time may result in the denial of the permits.

The Department will issue the permits with the attached conditions unless a petition for an administrative proceeding (hearing) is filed pursuant to the provisions of Section 120.57, F.S.

A person 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, F.S. The petition must contain the information set forth below and must be filed (received) in the Office of General Counsel of the Department at 2600 Blair Stone Road, Tallahassee, Florida 32399-2400. Petitions filed by the permit applicant and the parties listed below must be filed within 14 days of receipt of this intent. Petitions filed by other persons must be filed within 14 days of publication of the public notice or within 14 days of receipt of this intent, whichever first occurs. Petitioner shall mail a copy of the petition to the applicant at the address indicated above at the time of filing. Failure to file a petition within this time period shall constitute a waiver of any right such person may have to request an administrative determination (hearing) under Section 120.57, F.S.

The Petition shall contain the following information:

- (a) The name, address, and telephone number of each petitioner, the applicant's name and address, the Department Permit File Number and the county in which the project is proposed;
- (b) A statement of how and when each petitioner received notice of the Department's action or proposed action;
- (c) A statement of how each petitioner's substantial interests are affected by the Department's action or proposed action;

- (d) A statement of the material facts disputed by Petitioner, if any;
- (e) A statement of facts which petitioner contends warrant reversal or modification of the Department's action or proposed action;
- (f) A statement of which rules or statutes petitioner contends require reversal or modification of the Department's action or proposed action; and,
- (g) A statement of the relief sought by petitioner, stating precisely the action petitioner wants the Department to take with respect to the Department's action or proposed action.

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 position taken by it in this notice. Persons whose substantial interests will be affected by any decision of the Department with regard to the applications have the right to petition to become a party to the proceeding. The petition must conform to the requirements specified above and be filed (received) within 14 days of publication of this notice in the Office in General Counsel at the above address of the Department. Failure to petition within the allowed time frame constitutes a waiver of any right such person has to request a hearing under Section 120.57, F.S., and to participate as a party to this Any subsequent intervention will only be at the proceeding. approval of the presiding officer upon motion filed pursuant to Rule 28-5.207, F.A.C.

Executed in Tallahassee, Florida.

STATE OF FLORIDA DEPARTMENT OF ENVIRONMENTAL REGULATION

C. H. Fancy, P.E.

Chief

Bureau of Air Regulation

Copies furnished to:

- c: C. Collins, Central District
  - C. Triantafyllidis, HS
  - S. McClarty, P.E., HS

#### CERTIFICATE OF SERVICE

	The	undersig	ned	duly design	nated	deputy	clerk	hereby	cert	tifies
that	this	NOTICE	OF	INTENT TO	ISSUE	E and	all cop	pies w	ere 1	mailed
befor	ce the	close of	f bı	usiness on		1 - 10	-92			

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.

1-10-92

## State of Florida Department of Environmental Regulation Notice of Intent to Issue

The Department of Environmental Regulation (Department) hereby gives notice of its intent to issue permits (AC 05-203985: Bldg. 54; 05-202415: Bldg. 55; AC 05-205848: Bldg. 57; and, AC 05-205849: Bldg. 59) to Harris Semiconductor, Post Office Box 883, Melbourne, Florida 32902-0883. The facility is located along Palm Bay Road in the City of Palm Bay. The project includes an increase in potential/allowable volatile organic compounds/organic solvents (VOC) emissions for sources/Bldgs. 55 & 57, an increase in the potential acid emissions for source/Bldg. 59, and a decrease in the VOC and the potential acid emissions for potential/allowable source/Bldg. 54. Even though there will be a no net change in the facility's total potential pollutant emissions (i.e., VOC and acid), there will be a modification of the federally enforceable permit conditions currently applicable to each source. A determination of Best Available Control Technology (BACT) was not required. Department is issuing this Intent to Issue for the reasons stated in the Technical Evaluation and Preliminary Determination.

A person 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 (F.S.). The petition must contain the information set forth below and must be filed (received) in the Office of General Counsel of the Department at 2600 Blair Stone Road, Tallahassee, Florida 32399-2400, within fourteen (14) days of publication of this notice. Petitioner shall mail a copy of the petition to the applicant at the address indicated above at the time of filing. Failure to file a petition within this time period shall constitute a waiver of any right such person may have to request an administrative determination (hearing) under Section 120.57, F.S.

The Petition shall contain the following information:

- (a) The name, address, and telephone number of each petitioner, the applicant's name and address, the Department's Permit File Number and the county in which the project is proposed;
- (b) A statement of how and when each petitioner received notice of the Department's action or proposed action;
- (c) A statement of how each petitioner's substantial interests are affected by the Department's action or proposed action;
- (d) A statement of the material facts disputed by Petitioner, if any;
- (e) A statement of facts which petitioner contends warrant reversal or modification of the Department's action or proposed action;

- (f) A statement of which rules or statutes petitioner contends require reversal or modification of the Department's action or proposed action; and,
- (g) A statement of the relief sought by petitioner, stating precisely the action petitioner wants the Department to take with respect to the Department's action or proposed action.

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 position taken by it in this Notice. Persons whose substantial interests will be affected by any decision of the Department with regard to the applications have the The petition right to petition to become a party to the proceeding. must conform to the requirements specified above and be filed (received) within 14 days of publication of this notice in the Office of General Counsel at the above address of the Department. Failure to petition within the allowed time frame constitutes a waiver of any right such person has to request a hearing under Section 120.57, F.S., and to participate as a party to this Any subsequent intervention will only be at proceeding. approval of the presiding officer upon motion filed pursuant to Rule 28-5.207, Florida Administrative Code.

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

Department of Environmental Regulation Bureau of Air Regulation 2600 Blair Stone Road Tallahassee, Florida 32399-2400

Department of Environmental Regulation Central District 3319 Maguire Blvd., Suite 232 Orlando, Florida 32803-3767

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

# Technical Evaluation and Preliminary Determination

Harris Semiconductor Brevard County Palm Bay, Florida

Construction Permit Numbers:

AC 05-202415 AC 05-203985 AC 05-205848 AC 05-205849

Department of Environmental Regulation Division of Air Resources Management Bureau of Air Regulation

January 10, 1992

#### I. Application

#### A. Applicant

Harris Semiconductor Post Office Box 883 Melbourne, Florida 32902-0883

#### B. Project and Location

The applicant intends to modify its existing facility (i.e., Bldgs./sources 54, 55, 57 & 59), which includes an increase in the potential/allowable volatile organic compounds/organic solvents (VOC) emissions (55 & 57), an increase in the potential acid emissions (59), and a decrease in the potential/allowable VOC and the potential acid emissions (54). Even though there will be no net change in the facility's total potential pollutant emissions (i.e., VOC and acid), there will be a modification of the federally enforceable permit conditions currently applicable to each source.

The existing facility is located on Palm Bay Road in the City of Palm Bay, Brevard County, Florida.

The UTM coordinates are Zone 17, 538.7 km North and 3100.9 km West.

#### C. Process and Controls

Since the project's intent is to provide a buffer above the actual emissions of the sources (increases) and to bring the potential emissions more in line with source operations (decreases), there will be no change in the processing activities and the control systems.

#### D. The Standard Industrial Classification Codes:

o Buildings 54, 55, 57 & 59:
Cold Solvent Cleaning/ 40-01-003-99 Tons VOC/Solvent
Stripping Consumed

#### II. Rule Applicability

The proposed project is subject to preconstruction review under the provisions of Chapter 403, Florida Statutes, Florida Administrative Code (F.A.C.) Chapters 17-2 and 17-4, and 40 CFR (July 1, 1990 version).

The application packages were deemed complete on October 24, 1991.

The existing facility is located in an area designated attainment for all pollutants.

Since the facility is not one of those contained in Table 500-1, F.A.C. Chapter 17-2, the VOC threshold for triggering new source review pursuant to F.A.C. Rule 17-2.500(5), is 250 TPY.

The following table presents the net projected potential pollutant emissions associated with the proposed modification:

		Table 1		
	Net	Potential	Pollutant	Emissions (TPY)
Source			VOC	Acid
Building 54			-1.7	-0.2
Building 55			+0.7	
Building 57			+1.0	
Building 59				+0. <u>2</u>
		Total:	0.0	0.0

Note: o Allowed continuous operation (i.e., 8760 hrs/yr).

o Building 54 has a decrease in the allowable/potential VOC emissions of 1.7 TPY and is not creditable.

The following table presents the projected potential pollutant emissions from the current existing facility:

	Potent	ial Pollutan	t Emissions	(TPY)
Source	VOC			<u> Н2</u> S
Building 4	14.3			
51	34.7			
54	75.5			
55	0.3	(fugitive)		
57	2.0			
58	7.6			
59	8.4			
60	2.6			
61	0.3			
62	1.0	4		
63	13.5			
IGWS: Flare System			43.8	0.35

Total: 160.2 43.8 0
Note: o Allowed continuous operation (i.e., 8760 hrs/yr).

The following table presents the projected potential pollutant emissions from the facility after the modification:

	Table	e 3	
	Potenti	al Pollutant Emissions	(TPY)
Source	VOC	so <sub>2</sub>	<u>H2</u> S
Building 4	14.3		
51	34.7		
54	73.8		
55	1.0	(fugitive)	
57	3.0		
58	7.6		
59	8.4		
60	2.6		
61	0.3		
62	1.0		
63	13.5		
IGWS: Flare System		43.8	0.35
Total:	160.2	43.8	0.35

Note: o Allowed continuous operation (i.e., 8760 hrs/yr).

Based on the tables, the proposed project is a minor modification (+0.0 total TPY) to a major facility for VOC due to source potential emission increases and decreases, which will require changes in the federally enforceable conditions of each source's current permit. Therefore, the potential pollutant emissions shall be subject to review in accordance with F.A.C. Rule 17-2.520, Sources Not Subject to PSD or Nonattainment Requirements.

Since there is no specific emission limiting standard contained in F.A.C. Rule 17-2.600 nor are there any standards of performance for new stationary sources contained in F.A.C. Rule 17-2.660, the modification to each source/building will be permitted in accordance with F.A.C. Rule 17-2.620, General Pollutant Emission Limiting Standards.

In F.A.C. Rule 17-2.620(1)(a), no person shall store, pump, handle, process, load, unload or use in any process or installation volatile organic compounds or organic solvents without applying known and existing vapor emission control devices or systems deemed necessary and ordered by the Department. Pursuant to F.A.C. Rule 17-2.620(2), no person shall cause, suffer, allow or permit the discharge of air pollutants which cause or contribute to an objectionable odor. Objectionable odor is defined as any odor present in the outdoor atmosphere, which by itself or in combination with other odors, is or may be harmful or injurious to

human health or welfare, which unreasonably interferes with the comfortable use and enjoyment of life or property, or which creates a nuisance according to F.A.C. Rule 17-2.100, Definitions-Objectionable Odor.

The sources/buildings are subject to the applicable provisions of F.A.C. Rules 17-2.240: Circumvention; 17-2.250: Excess Emissions; and, 17-4.130: Plant Operation-Problems.

#### III. Summary of Emissions

#### A. Emission Limitations

The regulated pollutant emissions from Buildings 54, 55, 57 and 59, are VOC. Various acid gases are also being emitted during the manufacturing operations in these buildings. There are no specific emission limiting standards for these specific acids; however, the acid vapors will be scrubbed to reduce emissions.

The following table presents the resulting project's allowable VOC emissions and potential acid vapor emissions from each source/building:

	Table 4	
	Maximum Allowable Pollutant Emissions/Limitations	Potential Acid
Source	VOC	Emissions
Building 54	73.8	9.7
Building 55	1.0	
Building 57	3.0	
Building 59		0.3

Note: o Allowed continuous operations (i.e., 8760 hrs/yr).

The permitted emissions/limitations are in compliance with all requirements of F.A.C. Chapters 17-2 and 17-4.

#### B. Air Quality Impacts

From a technical review of the application packages, which shows no net change in the potential pollutant emissions, an air quality analysis is not required.

#### IV. Conclusion

Based on the information provided by Harris Semiconductor, the Department has reasonable assurance that the proposed modifications to Buildings/sources 54, 55, 57 and 59, which shows no net change in the facility's total potential pollutant emissions (i.e., VOC and acid), but requires a change in the federally enforceable conditions of each source's current permit (i.e., modification), as described in this evaluation, and subject to the conditions proposed herein, will not cause or contribute to a violation of any air quality standard, PSD increment, or any other technical provision of Chapter 17-2 of the Florida Administrative Code.

A 417 55



## Florida Department of Environmental Regulation

Twin Towers Office Bldg. ● 2600 Blair Stone Road ● Tallahassee, Florida 32399-2400 Lawton Chiles, Governor

Carol M. Browner, Secretary

Permittee: Harris Semiconductor P. O. Box 883 Melbourne, FL 32902-0883

Permit Number: AC 05-203985 Expiration Date: July 31, 1992

County: Brevard

28°01'20"N Latitude/Longitude:

80°36'10"W

Project: Building 54 Modification

This permit is issued under the provisions of Chapter 403, Florida Statutes, Florida Administrative Code (F.A.C.) Chapters 17-2 and 17-4, and 40 CFR (July, 1990 version). The above named permittee is hereby authorized to perform the work or operate the facility shown on the application and approved drawings, plans, and other documents attached hereto or on file with the Department and made a part hereof and specifically described as follows:

For the modification of Building 54, which is an existing source that utilizes hood type work stations for the manufacture of semiconductors, to permit a decrease in the potential acid and the potential/allowable VOC (volatile organic compounds/organic solvents) emissions. The scrubber control systems are:

- o F54SO1: a Beverly Pacific 50,000 scfm (43,141 acfm) horizontal cross-flow wet scrubber, using polypropylene packing, and with a PVC mist eliminator, for VOC and acid vapor removal; Model No. PS-50HT;
- a Harrington 17,000 scfm (16,000 acfm) horizontal crosso F54S02: flow wet scrubber, using PVC packing, and with a PVC mist eliminator, for VOC and acid vapor removal; Model No. ECH 66-9PBS; and,
- o F54SO3: a Beverly Pacific 30,000 scfm (29,000 acfm) cross-flow wet scrubber, using polypropylene packing, and with a PVC mist eliminator, for VOC and acid vapor removal; Model No. PS-24HT.

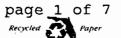
The building/source is located at the permittee's existing facility located on Palm Bay Road in the City of Palm Bay. coordinates are Zone 17, 538.7 km East and 3100.9 km North.

The Source Classification Codes are: Major Group 36 o Cold Solvent Cleaning/ 4-01-003-99 Tons VOC/solvent Stripping Consumed

The source shall be constructed in accordance with the permit application, plans, documents, amendments and drawings, except as otherwise noted in the General and Specific Conditions.

#### Attachments are listed below:

- 1. Application to Construct/Modify Air Pollution Sources, DER Form 17-2.202(1), received October 24, 1991.
- Technical Evaluation and Preliminary Determination dated January 10, 1992.



Permit Number: AC 05-203985 Expiration Date: July 31, 1992

#### GENERAL CONDITIONS:

- 1. The terms, conditions, requirements, limitations, and restrictions set forth in this permit are "Permit Conditions" and are binding and enforceable pursuant to Sections 403.161, 403.727, or 403.859 through 403.861, Florida Statutes. The permittee is placed on notice that the Department will review this permit periodically and may initiate enforcement action for any violation of these conditions.
- 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. Neither 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 is not 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, or plant life, or property caused by the construction or operation of this permitted source, or from penalties therefore; 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.
- 6. The permittee shall 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.

Permit Number: AC 05-203985 Expiration Date: July 31, 1992

#### GENERAL CONDITIONS:

- 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 and at a reasonable time, access to the premises, where the permitted activity is located or conducted to:
  - a. Have access to and copy any records that must be kept under the conditions of the permit;
  - b. Inspect the facility, equipment, practices, or operations regulated or required under this permit; and,
  - c. Sample or monitor 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 provide the Department with the following information:
  - a. a description of and cause of non-compliance; and,
  - b. the period of noncompliance, including dates and times; or, if not corrected, the anticipated time the non-compliance is expected to continue, and steps being taken to reduce, eliminate, and prevent recurrence of the non-compliance.

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 for 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 involving the permitted source arising under the Florida Statutes or Department rules, except where such use is prescribed by Sections 403.73 and 403.111, Florida Statutes. Such evidence shall only be used to the extent it is consistent with the Florida Rules of Civil Procedure and appropriate evidentiary rules.

Permit Number: AC 05-203985 Expiration Date: July 31, 1992

#### GENERAL CONDITIONS:

- 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 17-4.120 and 17-30.300, F.A.C., 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 or a copy thereof shall be kept at the work site of the permitted activity.
- 13. The permittee shall comply with the following:
  - a. Upon request, the permittee shall furnish all records and plans required under Department rules. During enforcement actions, the retention period for all records will be extended automatically unless otherwise stipulated by the Department;
  - b. The permittee shall hold 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) required by the permit, copies of all reports required by this permit, and records of all data used to complete the application for this permit. These materials shall be retained at least three years from the date of the sample, measurement, report, or application unless otherwise specified by Department rule; and,
  - 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 dates analyses were performed;
    - the person responsible for performing the analyses;
    - the analytical techniques or methods used; and,
    - the results of such analyses.

Permit Number: AC 05-203985 Expiration Date: July 31, 1992

#### GENERAL CONDITIONS:

14. 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 corrected promptly.

#### SPECIFIC CONDITIONS:

- 1. The maximum allowable VOC (volatile organic compounds/organic solvents) emissions from Building No. 54 is 73.8 tons per year.
- 2. The VOC vapor and acid gas exhaust scrubber systems must be operating properly during the working hours.
- 3. Continuous operation shall be allowed (i.e., 8760 hours per year).
- 4. Objectionable odors shall not be allowed off plant property pursuant to F.A.C. Rule 17-2.620(2).
- 5. An inspection and maintenance plan shall be submitted to the DER's Central District office as part of the operating permit application. The plan shall include provisions for the prevention and correction of VOC losses from leaks and equipment malfunctions.
- 6. By March 31 of each calendar year, an annual operating report shall be submitted to the DER's Central District office demonstrating compliance with the VOC emissions limit for Building 54.
- 7. Each scrubber system's efficiency and actual VOC emissions shall be established by a sampling and analysis program, which includes:
  - a) a sample shall be taken annually from each scrubber stack and analyzed using EPA Method 25A, pursuant to F.A.C. Rule 17-2.700 and 40 CFR 60, Appendix A;
  - b) the DER's Central District office shall receive at least 15 days notice in writing prior to sampling;
  - c) the report, summarizing the sampling results, shall be submitted to the DER's Central District office within 45 days after the last test run is completed;
  - d) the efficiency of each control system shall be established by tests (inlet and outlet) once every five years for operation permit renewal; and,

Permit Number: AC 05-203985 Expiration Date: July 31, 1992

#### SPECIFIC CONDITIONS:

- e) the annual VOC emissions shall be calculated using actual emissions data derived from stack test sampling results and the actual operating hours for the affected source/building.
- 8. This permit will supercede all other permits previously issued on this source/Building No. 54.
- 9. The source/Building No. 54 is subject to all applicable provisions of F.A.C. Chapters 17-2 and 17-4 and 40 CFR (July, 1990 version).
- 10. Projected potential acid emissions are 9.7 TPY.
- 11. Building No. 54 is subject to the applicable provisions of F.A.C. Rules 17-2.240: Circumvention; 17-2.250: Excess Emissions; and, 17-4.130: Plant Operation Problems.
- 12. Any modification pursuant to F.A.C. Rule 17-2.100, Definitions-Modification, shall be submitted to the DER's Central District office and Bureau of Air Regulation (BAR) office for approval.
- 13. The permittee, for good cause, may request that this construction permit be extended. Such a request shall be submitted to the DER's BAR prior to 60 days before the expiration of the permit (F.A.C. Rule 17-4.090).
- 14. An application for an operation permit must be submitted to the DER's Central District office at least 90 days prior to the expiration date of this construction permit. To properly apply for an operation permit, the applicant shall submit the appropriate application form, fee, certification that construction was completed noting any deviations from the conditions in the construction permit, and compliance test reports as required by this permit (F.A.C. Rules 17-4.055 and 17-4.220).

PERMITT	EE:
Harris	Semiconductor

Permit Number: AC 05-203985 Expiration Date: July 31, 1992

SPECIFIC CONDITIONS:

Issued this \_\_\_\_\_ day of \_\_\_\_\_, 1992

STATE OF FLORIDA DEPARTMENT OF ENVIRONMENTAL REGULATION

STEVE SMALLWOOD, P.E., Director Division of Air Resources Management



## Florida Department of Environmental Regulation

Twin Towers Office Bldg. • 2600 Blair Stone Road • Tallahassee, Florida 32399-2400 Lawton Chiles, Governor Carol M. Browner, Secretary

Permittee:
Harris Semiconductor
P. O. Box 883
Melbourne, FL 32902-0883

Permit Number: AC 05-202415 Expiration Date: July 31, 1992

County: Brevard

Latitude/Longitude: 28°01'20"N

80°36′10"W

Project: Building 55 Modification

This permit is issued under the provisions of Chapter 403, Florida Statutes, Florida Administrative Code (F.A.C.) Chapters 17-2 and 17-4, and 40 CFR (July, 1990 version). The above named permittee is hereby authorized to perform the work or operate the facility shown on the application and approved drawings, plans, and other documents attached hereto or on file with the Department and made a part hereof and specifically described as follows:

For the modification of Building 55, which is an existing source for the collection, short term storage, and shipping point for waste chemicals from the facility, to permit an increase in the potential/allowable VOC (volatile organic compounds/organic solvents) emissions. The scrubber control system is:

o F55SO1: a Tri-Mer Corp. 9,500 scfm (7,500 acfm) horizontal counter-flow wet scrubber, using a polypropylene filter pack, and with a mist eliminator, for VOC and acid vapor removal; Model No. F/W 3.

The building/source is located at the permittee's existing facility located on Palm Bay Road in the City of Palm Bay. The UTM coordinates are Zone 17, 538.7 km East and 3100.9 km North.

The Source Classification Codes are: Major Group 36
o Cold Solvent Cleaning/ 4-01-003-99 Tons VOC/solvent
Stripping Consumed

The source shall be constructed in accordance with the permit application, plans, documents, amendments and drawings, except as otherwise noted in the General and Specific Conditions.

#### Attachments are listed below:

- 1. Application to Construct/Modify Air Pollution Sources, DER Form 17-2.202(1), received October 24, 1997.
- 2. Technical Evaluation and Preliminary Determination dated January 10, 1992.

PERMITTEE: Permit Number: AC 05-202415
Harris Semiconductor Expiration Date: July 31, 1992

#### GENERAL CONDITIONS:

1. The terms, conditions, requirements, limitations, and restrictions set forth in this permit are "Permit Conditions" and are binding and enforceable pursuant to Sections 403.161, 403.727, or 403.859 through 403.861, Florida Statutes. The permittee is placed on notice that the Department will review this permit periodically and may initiate enforcement action for any violation of these conditions.

- 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. Neither 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 is not 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, or plant life, or property caused by the construction or operation of this permitted source, or from penalties therefore; 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.
- 6. The permittee shall 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.

Permit Number: AC 05-202415 Expiration Date: July 31, 1992

#### GENERAL CONDITIONS:

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 and at a reasonable time, access to the premises, where the permitted activity is located or conducted to:

- a. Have access to and copy any records that must be kept under the conditions of the permit;
- b. Inspect the facility, equipment, practices, or operations regulated or required under this permit; and,
- c. Sample or monitor 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 provide the Department with the following information:
  - a. a description of and cause of non-compliance; and,
  - b. the period of noncompliance, including dates and times; or, if not corrected, the anticipated time the non-compliance is expected to continue, and steps being taken to reduce, eliminate, and prevent recurrence of the non-compliance.

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 for 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 invotving the permitted source arising under the Florida Statutes or Department rules, except where such use is prescribed by Sections 403.73 and 403.111, Florida Statutes. Such evidence shall only be used to the extent it is consistent with the Florida Rules of Civil Procedure and appropriate evidentiary rules.

Permit Number: AC 05-202415 Expiration Date: July 31, 1992

#### GENERAL CONDITIONS:

- 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 17-4.120 and 17-30.300, F.A.C., 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 or a copy thereof shall be kept at the work site of the permitted activity.
- 13. The permittee shall comply with the following:
  - a. Upon request, the permittee shall furnish all records and plans required under Department rules. During enforcement actions, the retention period for all records will be extended automatically unless otherwise stipulated by the Department;
  - b. The permittee shall hold 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) required by the permit, copies of all reports required by this permit, and records of all data used to complete the application for this permit. These materials shall be retained at least three years from the date of the sample, measurement, report, or application unless otherwise specified by Department rule; and,
  - 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 dates analyses were performed;
    - the person responsible for performing the analyses;
    - the analytical techniques or methods used; and,
    - the results of such analyses.

Permit Number: AC 05-202415 Expiration Date: July 31, 1992

#### GENERAL CONDITIONS:

14. 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 corrected promptly.

#### SPECIFIC CONDITIONS:

- 1. The maximum allowable VOC (volatile organic compounds/organic solvents) emissions from Building No. 55 is 1.0 tons per year.
- 2. The VOC vapor and acid gas exhaust scrubber systems must be operating properly during the working hours.
- 3. Continuous operation shall be allowed (i.e., 8760 hours per year).
- 4. Objectionable odors shall not be allowed off plant property pursuant to F.A.C. Rule 17-2.620(2).
- 5. An inspection and maintenance plan shall be submitted to the DER's Central District office as part of the operating permit application. The plan shall include provisions for the prevention and correction of VOC losses from leaks and equipment malfunctions.
- 6. By March 31 of each calendar year, an annual operating report shall be submitted to the DER's Central District office demonstrating compliance with the VOC emissions limit for Building 55.
- 7. Each scrubber system's efficiency and actual VOC emissions shall be established by a sampling and analysis program, which includes:
  - a) a sample shall be taken annually from each scrubber stack and analyzed using EPA Method 25A, pursuant to F.A.C. Rule 17-2.700 and 40 CFR 60, Appendix A;
  - b) the DER's Central District office shall receive at least 15 days notice in writing prior to sampling;
  - c) the report, summarizing the sampling results, shall be submitted to the DER's Central District office within 45 days after the last test run is completed;
  - d) the efficiency of each control system shall be established by tests (inlet and outlet) once every five years for operation permit renewal; and,

Permit Number: AC 05-202415 Expiration Date: July 31, 1992

#### SPECIFIC CONDITIONS:

- e) the annual VOC emissions shall be calculated using actual emissions data derived from stack test sampling results and the actual operating hours for the affected source/building.
- 8. This permit will supercede all other permits previously issued on this source/Building No. 55.
- 9. The source/Building No. 55 is subject to all applicable provisions of F.A.C. Chapters 17-2 and 17-4 and 40 CFR (July, 1990 version).
- 10. Projected potential acid emissions are 0.1 TPY.
- 11. Building No. 55 is subject to the applicable provisions of F.A.C. Rules 17-2.240: Circumvention; 17-2.250: Excess Emissions; and, 17-4.130: Plant Operation Problems.
- 12. Any modification pursuant to F.A.C. Rule 17-2.100, Definitions-Modification, shall be submitted to the DER's Central District office and Bureau of Air Regulation (BAR) office for approval.
- 13. The permittee, for good cause, may request that this construction permit be extended. Such a request shall be submitted to the DER's BAR prior to 60 days before the expiration of the permit (F.A.C. Rule 17-4.090).
- 14. An application for an operation permit must be submitted to the DER's Central District office at least 90 days prior to the expiration date of this construction permit. To properly apply for an operation permit, the applicant shall submit the appropriate application form, fee, certification that construction was completed noting any deviations from the conditions in the construction permit, and compliance test reports as required by this permit (F.A.C. Rules 17-4.055 and 17-4.220).

PERMITT	EE:		
Harris	Semi	icond	uctor

Permit Number: AC 05-202415 Expiration Date: July 31, 1992

SPECIFIC CONDITIONS:

Issued this \_\_\_\_\_ day of \_\_\_\_\_, 1992

STATE OF FLORIDA DEPARTMENT OF ENVIRONMENTAL REGULATION

STEVE SMALLWOOD, P.E., Director Division of Air Resources Management



## Florida Department of Environmental Regulation

Twin Towers Office Bldg. ● 2600 Blair Stone Road ● Tallahassee, Florida 32399-2400 Carol M. Browner, Secretary

Lawton Chiles, Governor

Permittee: Harris Semiconductor P. O. Box 883 Melbourne, FL 32902-0883 Permit Number: AC 05-205848 Expiration Date: July 31, 1992

County: Brevard

28°01'20"N Latitude/Longitude:

80°36'10"W

Project: Building 57 Modification

This permit is issued under the provisions of Chapter 403, Florida Statutes, Florida Administrative Code (F.A.C.) Chapters 17-2 17-4, and 40 CFR (July, 1990 version). The above named permittee is hereby authorized to perform the work or operate the facility shown on the application and approved drawings, plans, and other documents attached hereto or on file with the Department and made a part hereof and specifically described as follows:

For the modification of Building 57, which is an existing source whose primary manufacturing operations are soldering and plating of integrated circuit parts, to permit an increase in the potential/ (volatile organic compounds/organic allowable VOC solvents) emissions. The scrubber control system is:

a Tri-Mer Corp. 13,500 scfm (9,328 acfm) horizontal o F57S01: counter-flow wet scrubber, using a polypropylene filter pack, and with a mist eliminator, for VOC and acid vapor removal; Model No. F/W 5.

The building/source is located at the permittee's existing facility located on Palm Bay Road in the City of Palm Bay. coordinates are Zone 17, 538.7 km East and 3100.9 km North.

The Source Classification Codes are: Major Group 36 o Cold Solvent Cleaning/ 4-01-003-99 Tons VOC/solvent Stripping Consumed

The source shall be constructed in accordance with the permit application, plans, documents, amendments and drawings, except as otherwise noted in the General and Specific Conditions.

#### Attachments are listed below:

- Application to Construct/Modify Air Pollution Sources, DER Form 17-2.202(1), received October 24, 1991.
- Evaluation and Preliminary Determination dated Technical January 10, 1992.

PERMITTEE: Permit Number: AC 05-205848
Harris Semiconductor Expiration Date: July 31, 1992

#### GENERAL CONDITIONS:

1. The terms, conditions, requirements, limitations, and restrictions set forth in this permit are "Permit Conditions" and are binding and enforceable pursuant to Sections 403.161, 403.727, or 403.859 through 403.861, Florida Statutes. The permittee is placed on notice that the Department will review this permit periodically and may initiate enforcement action for any violation of these conditions.

- 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. Neither 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 is not 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, or plant life, or property caused by the construction or operation of this permitted source, or from penalties therefore; 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.
- 6. The permittee shall 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.

Permit Number: AC 05-205848
Expiration Date: July 31, 1992

#### GENERAL CONDITIONS:

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 and at a reasonable time, access to the premises, where the permitted activity is located or conducted to:

- a. Have access to and copy any records that must be kept under the conditions of the permit;
- b. Inspect the facility, equipment, practices, or operations regulated or required under this permit; and,
- c. Sample or monitor 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 provide the Department with the following information:
  - a. a description of and cause of non-compliance; and,
  - b. the period of noncompliance, including dates and times; or, if not corrected, the anticipated time the non-compliance is expected to continue, and steps being taken to reduce, eliminate, and prevent recurrence of the non-compliance.

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 for 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 involving the permitted source arising under the Florida Statutes or Department rules, except where such use is prescribed by Sections 403.73 and 403.111, Florida Statutes. Such evidence shall only be used to the extent it is consistent with the Florida Rules of Civil Procedure and appropriate evidentiary rules.

Permit Number: AC 05-205848 Expiration Date: July 31, 1992

#### GENERAL CONDITIONS:

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 17-4.120 and 17-30.300, F.A.C., 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 or a copy thereof shall be kept at the work site of the permitted activity.
- 13. The permittee shall comply with the following:
  - a. Upon request, the permittee shall furnish all records and plans required under Department rules. During enforcement actions, the retention period for all records will be extended automatically unless otherwise stipulated by the Department;
  - b. The permittee shall hold 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) required by the permit, copies of all reports required by this permit, and records of all data used to complete the application for this permit. These materials shall be retained at least three years from the date of the sample, measurement, report, or application unless otherwise specified by Department rule; and,
  - 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 dates analyses were performed;
    - the person responsible for performing the analyses;
    - the analytical techniques or methods used; and,
    - the results of such analyses.

Permit Number: AC 05-205848
Expiration Date: July 31, 1992

#### GENERAL CONDITIONS:

14. 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 corrected promptly.

#### SPECIFIC CONDITIONS:

- 1. The maximum allowable VOC (volatile organic compounds/organic solvents) emissions from Building No. 57 is 2.0 tons per year.
- 2. The VOC vapor and acid gas exhaust scrubber systems must be operating properly during the working hours.
- 3. Continuous operation shall be allowed (i.e., 8760 hours per year).
- 4. Objectionable odors shall not be allowed off plant property pursuant to F.A.C. Rule 17-2.620(2).
- 5. An inspection and maintenance plan shall be submitted to the DER's Central District office as part of the operating permit application. The plan shall include provisions for the prevention and correction of VOC losses from leaks and equipment malfunctions.
- 6. By March 31 of each calendar year, an annual operating report shall be submitted to the DER's Central District office demonstrating compliance with the VOC emissions limit for Building 57.
- 7. Each scrubber system's efficiency and actual VOC emissions shall be established by a sampling and analysis program, which includes:
  - a) a sample shall be taken annually from each scrubber stack and analyzed using EPA Method 25A, pursuant to F.A.C. Rule 17-2.700 and 40 CFR 60, Appendix A;
  - b) the DER's Central District office shall receive at least 15 days notice in writing prior to sampling;
  - c) the report, summarizing the sampling results, shall be submitted to the DER's Central Bistrict office within 45 days after the last test run is completed;
  - d) the efficiency of each control system shall be established by tests (inlet and outlet) once every five years for operation permit renewal; and,

Permit Number: AC 05-205848
Expiration Date: July 31, 1992

#### SPECIFIC CONDITIONS:

e) the annual VOC emissions shall be calculated using actual emissions data derived from stack test sampling results and the actual operating hours for the affected source/building.

- 8. This permit will supercede all other permits previously issued on this source/Building No. 57.
- 9. The source/Building No. 57 is subject to all applicable provisions of F.A.C. Chapters 17-2 and 17-4 and 40 CFR (July, 1990 version).
- 10. Projected potential acid emissions are 0.2 TPY.
- 11. Building No. 57 is subject to the applicable provisions of F.A.C. Rules 17-2.240: Circumvention; 17-2.250: Excess Emissions; and, 17-4.130: Plant Operation Problems.
- 12. Any modification pursuant to F.A.C. Rule 17-2.100, Definitions-Modification, shall be submitted to the DER's Central District office and Bureau of Air Regulation (BAR) office for approval.
- 13. The permittee, for good cause, may request that this construction permit be extended. Such a request shall be submitted to the DER's BAR prior to 60 days before the expiration of the permit (F.A.C. Rule 17-4.090).
- 14. An application for an operation permit must be submitted to the DER's Central District office at least 90 days prior to the expiration date of this construction permit. To properly apply for an operation permit, the applicant shall submit the appropriate application form, fee, certification that construction was completed noting any deviations from the conditions in the construction permit, and compliance test reports as required by this permit (F.A.C. Rules 17-4.055 and 17-4.220).

PERMITT	EE:
Harris	Semiconductor

Permit Number: AC 05-205848 Expiration Date: July 31, 1992

SPECIFIC CONDITIONS:

Issued this \_\_\_\_ day of , 1992

STATE OF FLORIDA DEPARTMENT OF ENVIRONMENTAL REGULATION

STEVE SMALLWOOD, P.E., Director Division of Air Resources Management



## Florida Department of Environmental Regulation

Twin Towers Office Bldg. ● 2600 Blair Stone Road ● Tallahassee, Florida 32399-2400 Lawton Chiles, Governor Carol M. Browner, Secretary

Permittee:
Harris Semiconductor
P. O. Box 883
Melbourne, FL 32902-0883

Permit Number: AC 05-205849 Expiration Date: July 31, 1992

County: Brevard

Latitude/Longitude: 28°01'20"N

80°36′10"W

Project: Building 59 Modification

This permit is issued under the provisions of Chapter 403, Florida Statutes, Florida Administrative Code (F.A.C.) Chapters 17-2 and 17-4, and 40 CFR (July, 1990 version). The above named permittee is hereby authorized to perform the work or operate the facility shown on the application and approved drawings, plans, and other documents attached hereto or on file with the Department and made a part hereof and specifically described as follows:

For the modification of Building 59, which is an existing source used for the manufacture of semiconductors, to permit an increase in the potential acid emissions. The scrubber control and exhaust systems are:

#### Reliability Shop:

- o F59SO1: a Beverly Pacific 40,000 scfm (30,838 acfm) horizontal cross-flow wet scrubber, using polypropylene packing, and with a PVC mist eliminator for acid vapor removal; Model No. PS-40HT;
- o F59SO2: a Beverly Pacific 20,000 scfm (10,972 acfm) vertical counter-current wet scrubber, using polypropylene packing, with a PVC mist eliminator, for VOC (volatile organic compounds/organic solvents) vapor removal; Model No. PS-24VT; and,

Probe Card Repair Shop: o F59E04: an exhaust fan.

The building/source is located at the permittee's existing facility located on Palm Bay Road in the City of Palm Bay. The UTM coordinates are Zone 17, 538.7 km East and 3100.9 km North.

The Source Classification Codes are: Major Group 36 o Cold Solvent Cleaning/ 4-01-003-99 Tons VOC/solvent Stripping Consumed

The source shall be constructed in actordance with the permit application, plans, documents, amendments and drawings, except as otherwise noted in the General and Specific Conditions.

#### Attachments are listed below:

- 1. Application to Construct/Modify Air Pollution Sources, DER Form 17-2.202(1), received October 24, 1991.
- 2. Technical Evaluation and Preliminary Determination dated January 10, 1992.

PERMITTEE: Permit Number: AC 05-205849
Harris Semiconductor Expiration Date: July 31, 1992

#### GENERAL CONDITIONS:

1. The terms, conditions, requirements, limitations, and restrictions set forth in this permit are "Permit Conditions" and are binding and enforceable pursuant to Sections 403.161, 403.727, or 403.859 through 403.861, Florida Statutes. The permittee is placed on notice that the Department will review this permit periodically and may initiate enforcement action for any violation of these conditions.

- 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. Neither 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 is not 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, or plant life, or property caused by the construction or operation of this permitted source, or from penalties therefore; 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.
- 6. The permittee shall 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.

PERMITTEE:
Harris Semiconductor

Permit Number: AC 05-205849
Expiration Date: July 31, 1992

#### GENERAL CONDITIONS:

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 and at a reasonable time, access to the premises, where the permitted activity is located or conducted to:

- a. Have access to and copy any records that must be kept under the conditions of the permit;
- b. Inspect the facility, equipment, practices, or operations regulated or required under this permit; and,
- c. Sample or monitor 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 provide the Department with the following information:
  - a. a description of and cause of non-compliance; and,
  - b. the period of noncompliance, including dates and times; or, if not corrected, the anticipated time the non-compliance is expected to continue, and steps being taken to reduce, eliminate, and prevent recurrence of the non-compliance.

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 for 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 involving the permitted source arising under the Florida Statutes or Department rules, except where such use is prescribed by Sections 403.73 and 403.111, Florida Statutes. Such evidence shall only be used to the extent it is consistent with the Florida Rules of Civil Procedure and appropriate evidentiary rules.

Page 3 of 7

PERMITTEE: Permit Number: AC 05-205849
Harris Semiconductor Expiration Date: July 31, 1992

#### GENERAL CONDITIONS:

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 17-4.120 and 17-30.300, F.A.C., 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 or a copy thereof shall be kept at the work site of the permitted activity.
- 13. The permittee shall comply with the following:
  - a. Upon request, the permittee shall furnish all records and plans required under Department rules. During enforcement actions, the retention period for all records will be extended automatically unless otherwise stipulated by the Department;
  - b. The permittee shall hold 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) required by the permit, copies of all reports required by this permit, and records of all data used to complete the application for this permit. These materials shall be retained at least three years from the date of the sample, measurement, report, or application unless otherwise specified by Department rule; and,
  - 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 dates analyses were performed;
    - the person responsible for performing the analyses;
    - the analytical techniques or methods used; and,
    - the results of such analyses.

PERMITTEE:
Harris Semiconductor

Permit Number: AC 05-205849 Expiration Date: July 31, 1992

#### GENERAL CONDITIONS:

14. 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 corrected promptly.

#### SPECIFIC CONDITIONS:

- 1. The maximum allowable VOC (volatile organic compounds/organic solvents) emissions from Building No. 59 is 8.4 tons per year.
- 2. The VOC vapor and acid gas exhaust scrubber systems must be operating properly during the working hours.
- 3. Continuous operation shall be allowed (i.e., 8760 hours per year).
- 4. Objectionable odors shall not be allowed off plant property pursuant to F.A.C. Rule 17-2.620(2).
- 5. An inspection and maintenance plan shall be submitted to the DER's Central District office as part of the operating permit application. The plan shall include provisions for the prevention and correction of VOC losses from leaks and equipment malfunctions.
- 6. By March 31 of each calendar year, an annual operating report shall be submitted to the DER's Central District office demonstrating compliance with the VOC emissions limit for Building 59.
- 7. Each scrubber system's efficiency and actual VOC emissions shall be established by a sampling and analysis program, which includes:
  - a) a sample shall be taken annually from each scrubber stack and analyzed using EPA Method 25A, pursuant to F.A.C. Rule 17-2.700 and 40 CFR 60, Appendix A;
  - b) the DER's Central District office shall receive at least 15 days notice in writing prior to sampling;
  - c) the report, summarizing the sampling results, shall be submitted to the DER's Central District office within 45 days after the last test run is completed;
  - d) the efficiency of each control system shall be established by tests (inlet and outlet) once every five years for operation permit renewal; and,

PERMITTEE: Permit Number: AC 05-205849
Harris Semiconductor Expiration Date: July 31, 1992

#### SPECIFIC CONDITIONS:

e) the annual VOC emissions shall be calculated using actual emissions data derived from stack test sampling results and the actual operating hours for the affected source/building.

- 8. This permit will supercede all other permits previously issued on this source/Building No. 59.
- 9. The source/Building No. 59 is subject to all applicable provisions of F.A.C. Chapters 17-2 and 17-4 and 40 CFR (July, 1990 version).
- 10. Projected potential acid emissions are 0.3 TPY.
- 11. Building No. 59 is subject to the applicable provisions of F.A.C. Rules 17-2.240: Circumvention; 17-2.250: Excess Emissions; and, 17-4.130: Plant Operation Problems.
- 12. Any modification pursuant to F.A.C. Rule 17-2.100, Definitions-Modification, shall be submitted to the DER's Central District office and Bureau of Air Regulation (BAR) office for approval.
- 13. The permittee, for good cause, may request that this construction permit be extended. Such a request shall be submitted to the DER's BAR prior to 60 days before the expiration of the permit (F.A.C. Rule 17-4.090).
- 14. An application for an operation permit must be submitted to the DER's Central District office at least 90 days prior to the expiration date of this construction permit. To properly apply for an operation permit, the applicant shall submit the appropriate application form, fee, certification that construction was completed noting any deviations from the conditions in the construction permit, and compliance test reports as required by this permit (F.A.C. Rules 17-4.055 and 17-4.220).

PERMITT	EE:
Harris	Semiconductor

Permit Number: AC C5-205849 Expiration Date: July 31, 1992

SPECIFIC CONDITIONS:

Issued this \_\_\_\_\_ day of \_\_\_\_\_, 1992

STATE OF FLORIDA DEPARTMENT OF ENVIRONMENTAL REGULATION

STEVE SMALLWOOD, P.E., Director Division of Air Resources Management ATTACHMENTS AVAILABLE UPON REQUEST

RECEIVED DER - MAIL ROOM

LETTER OF TRANSMITTALITE 03

Date: October 22, 1991

# RECEIVED

To: Mr. Clair H. Fancy

Bureau Chief

ÖĞT 24 1991

Bureau of Air Regulation 2600 Blair Stone Road

Bureau of Air Regulation

Tallahassee, Fl 32399

Re:

Construction Permits AC 05-190800 (Bldg. 54); AC 05-190799 (Bldg. 55); AC 05-189178 (Bldg. 57); AC 05-189176 (Bldg. 58); AC 05-180707 (Bldg. 59); AC 05-190797 (Bldg. 62), Harris Semiconductor,

Melbourne.

WE ARE SE	NDING YOU:		THESE ARE TRANSMITTED:				
[ ] Und [ ] Blu	ached er Separate C eprints y of Letter	over	<pre>[X] For approval [ ] For Your Use [ ] As Requested [ ] For Review and Comment</pre>				
Copies	Date	No.	Description				
1	10/22/91	1	Letter of request for extension of permits for Bldgs. 54, 55, 58, 62.				
1	10/22/91	2	Letter by a Company officer authorizing Mr. John Steiner, Director of Environmental and Facilities, to represent the owner.				
1	10/22/91	3	Permit Application Fee for \$1000.00				
4	10/22/91	4	Modification to permit application for Bldgs. 54, 55, 57, 59.				

#### REMARKS: Dear Mr. Clair:

Should you have any questions or require any additional information in regards to the above mentioned submittal please, contact me at (407) 729-5301.

cc: D. Bock

Signed: Constantine Mantalyflidig

Constantine Triantafyllidis, R.E.P.

## **Best Available Copy**

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R. CLAIR FANC	Y (904) 48	°8-1344	NO. OF PHOXAGES	<i> </i>	UBJECT CHECK IF  10 LETTER FORON DEPRESS	, ,	-\	
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MARRIS SE		`	h.L.					
ROM			ORIGIN AL	Trale				



JON E. CORNELL President

6 March 1991

#### TO WHOM IT MAY CONCERN:

I, Jon E. Cornell, President of HARRIS SEMICONDUCTOR, a sector within HARRIS CC RPORATION, do hereby authorize John Steiner, Sector Director of Facilities and Environmental Affairs of said HARRIS SEMICONDUCTOR, to execute applications for Pollution Source permits to the Department of Environmental Regulation of the State of Florida, and the United States Environmental Protection Agency. Mr. Steiner is further authorized to sign monitoring reports and execute other correspondence related to these permits for the Harris Semiconductor, Melbourne, Florida site.

Jon E. Cornell

### **Best Available Copy**

VOUCHER NUMBER	. INVOICE NUMBER	PURCHASE ORDER	INVOICE DATE	AMOUNT	DISCOUNT	NET AMOUNT	
68 <b>18</b> 87 55,57,	PERMIT 59,54		10-04-91	1,000.00	.00	1,000.00	
		,					
			•				
		TOTAL	s	1,000.00	.00	1,000.00	

REMITTANCE STATEMENT / DETACH BEFORE DEPOSITING

HARRIS SEMICONDUCTOR SECTOR

HARRIS

HARRIS CORPORATION
SEMICONDUCTOR SECTOR

Υ'

THE FIRST NATIONAL BANK OF ATLANTA AUGUSTA, GEORGIA

64-1327 611

182761

10/11/91

CHECK NO. 00182761

NET AMOUNT

\*\*\*\*\*1,000.00

NE THOUSAND AND 00/100 DOLLARS

TO THE ORDER OF

DEFARTMENT OF ENVIRONMENTAL REGULATION BUREAU OF AIR QUALITY MANAGE 2600 BLAIR STONE RD TALLAHASSE, FL HARRIS CORPORATION SEMICONDUCTOR SECTOR

32301

AUTHORIZED SIGNATURE

## DEPARTMENT OF ENVIRONMENTAL REGULATION

RECEIVED DER - MAIL ROOM

\$1,000 pd, 10-24-91 Pecpt # 180709

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

1991 OCT 24 AM II: 03.

VICTORIA J. TSCHINKEL SECRETARY

Bureau of Air Regulation

CO5-203985

APPLICATION TO OPERATE/O	CONSTRUCT AIR POLLUTION SOURCES
SOURCE TYPE: Stationary	[ ] New <sup>1</sup> [X] Existing <sup>1</sup>
APPLICATION TYPE: [ ] Construction [X] C	Operation [X] Modification
COMPANY NAME: Harris Semiconductor	COUNTY: Brevard
Identify the specific emission point source	ce(s) addressed in this application (i.e. Lime
Kiln No. 4 with Venturi Scrubber; Peaking	Unit No. 2, Gas Fired) Bldgs. 547 55, 57, 59
SOURCE LOCATION: Street Palm Bay Road	City Palm Bay
UTM: East 17-538700	North 17-3100900
Latitude 28 • 01.	20 'N Longitude 80 • 36 ' 10 'W
APPLICANT NAME AND TITLE: John R. Steine	r, Director Enyironmental & Facilities
APPLICANT ADDRESS: P.O. Box 883, N	Melbourne, FL 32901
I certify that the statements made in permit are true, correct and complete I agree to maintain and operate the facilities in such a manner as to constatutes, and all the rules and regula also understand that a permit, if grant statements are statements.	this application for a modified to the best of my knowledge and belief. Further, pollution control source and pollution control comply with the provision of Chapter 403, Florida ations of the department and revisions thereof. I anted by the department, will be non-transferable ment upon sale or legal transfer of the permitted  Signed:
	John R. Steiner, Director Environmental & Facilities Name and Title (Please Type)  Date: 10/31/9/ Telephone No. (407) 724-7078
B. PROFESSIONAL ENGINEER REGISTERED IN FI	LORIDA (where required by Chapter 471, F.S.)
been designed/examined by me and for principles applicable to the treatmen	ng features of this pollution control project have und to be in conformity with modern engineering at and disposal of pollutants characterized in the able assurance, in my professional judgment, that

1 Ree Florida Administrative Code Rule 17-2.100(57) and (104)

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•	llution sources.	Signed South WMC Clarky
	SOLVE STATE CE SOLVE SOL	Scott W. McClarty, P.E.
	AED SOLL ALL ALL ALL ALL ALL ALL ALL ALL ALL	Name (Please Type)
	70 6	Harris Semiconductor Company Name (Please Type)
		P.O. Box 883, Melbourne, FL 32901
	ANTIA.	Mailing Address (Please Type)
lorid	a Registration No. 34468	Date: 10/21/91 Telephone No. (407) 729-4655
	SECTION	II: GENERAL PROJECT INFORMATION
an wh	d expected improvements in	nt of the project. Refer to pollution control equipment, source performance as a result of installation. State ult in full compliance. Attach additional about if
	This is a modification to	the construction permits AC 05-190800 (Bldg. 54);
_		the construction permits AC 05-190800 (Bldg. 54); C 05-189178 (Bldg. 57); AC 05-180707 (Bldg.59)
_		C 05-189178 (Bldg. 57); AC 05-180707 (Bldg.59)
	AC 05-190799 (Bldg. 55); A	C 05-189178 (Bldg. 57); AC 05-180707 (Bldg.59)
	AC 05-190799 (Bldg. 55); AC See Insert A for further in hedule of project covered in hedule	C 05-189178 (Bldg. 57); AC 05-180707 (Bldg.59)
St Co: fo In	AC 05-190799 (Bldg. 55); Ac See Insert A for further in hedule of project covered is art of Construction N/A sts of pollution control syrindividual components/unit	C 05-189178 (Bldg. 57); AC 05-180707 (Bldg.59)  Information  In this application (Construction Permit Application Only
St Co: fo In	AC 05-190799 (Bldg. 55); AC See Insert A for further in hedule of project covered in art of Construction N/A sts of pollution control syrindividual components/uniformation on actual costs armit.)	C 05-189178 (Bldg. 57); AC 05-180707 (Bldg. 59)  Information  In this application (Construction Permit Application Unly  Completion of Construction  ystem(s): (Note: Show breakdown of estimated costs only its of the project serving pollution control purposes.
St Co: fo In	AC 05-190799 (Bldg. 55); AC See Insert A for further in hedule of project covered in art of Construction N/A sts of pollution control syrindividual components/uniformation on actual costs armit.)	C 05-189178 (Bldg. 57); AC 05-180707 (Bldg. 59)  Information  In this application (Construction Permit Application Only  Completion of Construction  ystem(s): (Note: Show breakdown of estimated costs only its of the project serving pollution control purposes. Shall be furnished with the application for operation
St Co: fo In	AC 05-190799 (Bldg. 55); AC See Insert A for further in hedule of project covered in art of Construction N/A sts of pollution control syrindividual components/uniformation on actual costs armit.)	C 05-189178 (Bldg. 57); AC 05-180707 (Bldg. 59)  Information  In this application (Construction Permit Application Only  Completion of Construction  ystem(s): (Note: Show breakdown of estimated costs only its of the project serving pollution control purposes. Shall be furnished with the application for operation
St Confo In pe	AC 05-190799 (Bldg. 55); AC See Insert A for further in hedule of project covered is art of Construction N/A sts of pollution control syr individual components/uniformation on actual costs armit.)  N/A	C 05-189178 (Bldg. 57); AC 05-180707 (Bldg.59)  Information  In this application (Construction Permit Application Only  Completion of Conetruction  ystem(s): (Note: Show breakdown of estimated costs only its of the project serving pollution control purposes. shall be furnished with the application for operation  commits, orders and notices associated with the emission

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#### INSERT A

The proposed modification to the construction permits for Buildings 54, 55, 57 and 59 is intended to adjust the emission limits of VOCs or Acids, as described below, without changing the overall site emissions.

This modification was engineered as a result of the last two sets of monitoring data collected for this site. The monitoring indicated a significant decrease in VOC and acid emissions from Building 54 due to certain chemical substitutions and higher than expected VOC emissions from Building 57 and Acid emissions from Building 59.

Consequently, it was deemed necessary to request for an additional buffer to the emission limits for Buildings 57 (VOCs) and 59 (Acids) to accommodate for fluctuations in the production activities and chemical usage. Similarly, we request for an additional buffer to the VOC emissions from Building 55. The overall increase in emissions is proposed to be offset by a proportionate decrease in the Building 54 emissions.

Specifically, the modification submittal proposes for an increase/reduction in the VOC or Acid emissions as follows:

Bldg 55, VOC emissions from 0.3 tons to 1.0 ton a year. Bldg 57, VOC emissions from 2.0 tons to 3.0 tons a year. Bldg 59, Acid emissions from 0.1 tons to 0.3 tons a year. Bldg 54, VOC emissions from 75.5 tons to 73.8 tons a year.

Bldg 54 Acid emissions from 9.9 tons to 9.7 tons a year.

### INSERT B

Building	54:	Α0	05-65408 05-115804 05-147321	issued	5/20/86;	exp.	5/22/91
Building	55:		05-104523 05-164544				
Building	57:		05-104522 05-161 <b>7</b> 06				
Building	59:	AC AC	05-104521 05-104527 05-150794 05-174445	issued issued	1/15/86; 3/31/89;	exp.	4/1/86 12/5/89

_	power plant, hrs/yr; if seasonal, describe:	
	this is a new source or major modification, answer the following quest es or No)	ions.
1.	Is this source in a non-attainment area for a particular pollutant?	No
	a. If yes, has "offset" been applied?	·
	b. If yes, has "Lowest Achievable Emission Rate" been applied?	
	c. If yes, list non-attainment pollutants.	
2.	Does best available control technology (SACT) apply to this source? If yes, see Section VI.	No
3.	Does the State "Prevention of Significant Deterioriation" (PSD) requirement apply to this source? If yes, see Sections VI and VII.	No
4.	Do "Standards of Performance for New Stationary Sources" (NSPS) apply to this source?	No
5.	Do "National Emission Standards for Hazardous Air Pollutants" (NESHAP) apply to this source?	No
	"Reasonably Available Control Technology" (RACT) requirements apply this source?	No

b. If yes, in addition to the information required in this form, any information requested in Rule 17-2.650 must be submitted.

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

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

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

	Contem	inants	Utilization	Relate to Flow Diagram		
Description.	Type	% Wit	Rate - 1bs/hr			
SEE ATTACHMENT	C					
				·		
		_				

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

- 1. Total Process Input Rate (lbs/hr):\_ not applicable
- Product Weight (lbs/hr): not applicable
- Airborne Contaminants Emitted: (Information in this table must be submitted for each emission point, use additional sheets as necessary)

Name of	Emission <sup>1</sup> Maximum Actual lbs/hr T/yr		Allowed <sup>2</sup> Emission Rate per	Allowable <sup>3</sup> Emission	Potential <sup>4</sup> Emission		Relate to Flow
Contaminant			Rule lbs/hr 17-2		lbs/yr	T/yr	Diagram
SEE ATT	ACHMENT B						
			•	Ĺ			
							-
		· <b>*</b>					_

<sup>&</sup>lt;sup>1</sup>See Section V. Item 2.

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<sup>&</sup>lt;sup>2</sup>Reference applicable emission standards and units (e.g. Rule 17-2.600(5)(b)2. Table II, E. (1) - 0.1 pounds per million BTU heat input)

<sup>3</sup>Calculated from operating rate and applicable standard.

<sup>&</sup>lt;sup>4</sup>Emission, if source operated without control (See Section V, Item 3).

J. Control Devices: (See Section Y, Item 4)

Name and Type (Model & Serial No.)	Contaminant	Efficiency	Range of Particles Size Collected (in wicrons) (If applicable)	Basis for Efficiency (Section V Item 5)
SEE ATTACHMENT D	-			
				· ·
		<del>-                                    </del>		

#### E. Fuels

	Consumo	tion*	<del></del>	
Type (Se Specific)	avg/hr mex./hr		Maximum Heat Input (MMBTU/hr)	
•.				

#### ----SEE ATTACHMENT D-----

SECTION 19: Stack Disaster:			-					each stack);		
SECTION IV: INCINERATOR INFORMATION  not applicable  Type of Type 0 Type I Type II Type III Type IV (Sarbage) (Patholog (Liq.& Gae By-prod.)  Actual 10/hr Incinerated (10s/hr) Design Capacity (10s/hr)  Approximate Number of Hours of Operation per day day/wk wks/yr.  Annufacturer  Date Constructed Heat Release (8TU/hr) Type BIU/hr (*f)  Primary Chamber  Secondary Chamber  Secondary Chamber  Sizek Height: ft. Stack Disaster: Stack Temp.  ACFM DSCFM* Velocity: first Stack Temp.  ACFM DSCFM* Velocity: first Stack Disaster in grains per stated cubic foot dry gas corrected to 50% excess air.										
SECTION IV: INCINERATOR IMFORMATION  not applicable  Type of Type D Type I Type II Type III Type IV Type V Type VI (Liq.4 Gae Sy-prod.)  Actual lb/hr Incinerated (lbs/hr)  Description of Waste  Fotal Weight Incinerated (lbs/hr)  Design Capacity (lbs/hr)  Approximate Number of Hours of Operation per day day/wk wks/yr.  Hanufacturer  Date Constructed Hodel No.  Volume (ft) <sup>3</sup> Heat Release Fuel Temperature (*f)  Primary Chamber  Secondary Chamber  Secondary Chamber  Stack Height: ft. Stack Diamter: Stack Temp.  Las Flow Rate: ACFM DSSCFM* Velocity: Incine Stack Diamter Stack Down on the missions rate in grains per streated cubic foot dry gas corrected to 50% excess air.					_					
Type of Type 0 Type I Type II Type III Type IV Type V Type VI (Rabbish) (Rabbish) (Rabbish) (Carbage) (Patholog- (Liq.& Gae By-prod.)  Actual lb/hr Incinerated Ib/hr Incinerated (lbs/hr) Design Capacity (lbs/hr) Proximate Number of Hours of Operation per day day/wk wks/yr.  Indicaturer Added No.  Volume (ft) <sup>3</sup> (BIU/hr) Type BIU/hr (*f)  Primary Chamber (*f)  Secondary Chember ACFM DSCFM** Velocity: first Stack Diamter: Stack Temp.  ACFM DSCFM** Velocity: first Stack Diamter: Stack Temp.  ACFM DSCFM** Velocity: first Stack Diamter is grains per started cubic foot dry gas corrected to 50% excess air.	ater Vapo	r Content:	<del></del>		% Ve	locity:	<del> </del>	FP:		
Waste (Plastics) (Rubbish) (Refuse) (Garbage) (Patholog- (Liq.& Gaster) (Solid By-prod.)  Actual lb/hr Incinerated (Ibs/hr)			SECT				ON			
Design Capacity (lbs/hr)   Design Capacity (lb	• •					(Patholog-	(Liq.& Gas	(Solid By-prod.)		
escription of Waste  otal Weight Incinerated (lbs/hr) Design Capacity (lbs/hr)  pproximate Number of Hours of Operation per day day/wkwks/yr  anufacturer  ate Constructed Model No     Volume	lb/hr Inciner-					·				
Design Capacity (lbs/hr)  pproximate Number of Hours of Operation per day	trolled						•			
Valume (ft) <sup>3</sup> Heat Release Fuel Temperature (ef)  Primary Chamber  tack Height: ft. Stack Diamter: Stack Temp  as flow Rate: ACFM DSCFM* Velocity: ft.  If 50 or more tons per day design capacity, submit the emissions rate in grains per stated cubic foot dry gas corrected to 50% excess air.	pproximat	e Number of	Hours of	Operation	per day _	-				
(ft) (BTU/hr) Type BTU/hr (*F)  Primary Chamber  Secondary Chamber  tack Height: ft. Stack Diamter: Stack Temp  as Flow Rate: ACFM DSCFM+ Velocity: F  If 50 or more tons per day design capacity, submit the emissions rate in grains per stand cubic foot dry gas corrected to 50% excess air.	ate Const	ructed			Madel	No. 4		<del></del>		
Secondary Chamber  tack Height: ft. Stack Diamter: Stack Temp  as Flow Rate: ACFM DSCFM+ Velocity: F  If 50 or more tons per day design capacity, submit the emissions rate in grains per stated cubic foot dry gas corrected to 50% excess air.	<del>-</del> -									
as Flow Rate:ACFMDSCFM+ Velocity:F  If 50 or more tons per day design capacity, submit the emissions rate in grains per stated cubic foot dry gas corrected to 50% excess air.	Primary C	hamber								
ACFM DSCFM+ Velocity:F  If 50 or more tons per day design capacity, submit the emissions rate in grains per sta  and cubic foot dry gas corrected to 50% excess air.	Secondary	Chamber								
If 50 or more tons per day design capacity, submit the emissions rate in grains per start and cubic foot dry gas corrected to 50% excess air.	tack Heig	ht:	ft. :	Stack Dia	mter:		Stack	Temp		
If 50 or more tons per day design capacity, submit the emissions rate in grains per start and cubic foot dry gas corrected to 50% excess air.	as Flow R	ate:		_ACFM		DSCFH+	Velocity:	FF		
ype of pollution control device: [ ] Cyclone [ ] Wet Scrubber [ ] Afterburner	If 50 or	more tons p	er day des.	ign capac	ity, submi	t the emiss				
[ ] Other (specify)	ype of po	llution con	trol devic							

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	···	<u>.                                      </u>										
	disposal ):			other	then	thet	emitted	from	the	stack	(scrubber	water
			 									-
			 	· · · · · · ·								

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

#### SECTION V: SUPPLEMENTAL REQUIREMENTS

Please provide the following supplements where required for this application.

- 1. Total process input rate and product weight -- show derivation [Rule 17-2.100(127)]
- 7 ?. To a construction application, attach basis of emission estimate (e.g., design calculations, design drawings, pertinent manufacturer's test data, etc.) and attach proposed methods (e.g., FR Part 60 Methods 1, 2, 3, 4, 5) to show proof of compliance with applicable standards. To an operation application, attach test results or methods used to show proof of compliance. Information provided when applying for an operation permit from a construction permit shall be indicative of the time at which the test was made.
  - 3. Attach basis of potential discharge (e.g., emission factor, that is, AP42 test).
  - 4. With construction permit application, include design details for all air pollution control systems (e.g., for baghouse include cloth to air ratio; for scrubber include cross-section sketch, design pressure drop, etc.)
  - 5. With construction permit application, attach derivation of control device(s) efficiency. Include test or design data. Items 2, 3 and 5 should be consistent: actual emissions = potential (l-efficiency).
  - 6. An 8 1/2" x 11" flow diagram which will, without revealing trade secrets, identify the individual operations and/or processes. Indicate where raw materials enter, where solid and liquid waste exit, where gaseous emissions and/or airborne particles are evolved and where finished products are obtained.
  - 7. An 8 1/2" x 11" plot plan showing the location of the establishment, and points of air-borne emissions, in relation to the surrounding area, residences and other permanent structures and roadways (Example: Copy.of relevant portion of USGS topographic map).
  - 8. An 9 1/2" x 11" plot plan of facility showing the location of manufacturing processes and outlets for airborne emissions. Relate all flows to the flow diagram.

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9.	The appropriate application fee in accord made payable to the Department of Environ	fance with Rule 17-4.05. The check should be mental Regulation.
10.		, attach a Certificate of Completion of Con- is constructed as shown in the construction
	SECTION VI: BEST AVAIL	ABLE CONTROL TECHNOLOGY
A.		tionary sources pursuant to 40 C.F.R. Part 60
	applicable to the source?	•
	[ ] Yes [ ] No	
	Contaminant	Rate or Concentration
_		
8.	Has EPA declared the best available cont yes, attach copy)	rol technology for this class of sources (If
	[ ] Yes [ ] No	•
	Contaminant	Rate or Concentration
		<del></del>
	·	
	<del>-</del>	
c.	What emission levels do you propose as be	st available control technolory?
	Conteminant	Rate or Concentration
•		
D.	Describe the existing control and treatme	nt technology (if any).
	1. Control Device/System:	2. Operating Principles:
	3. Efficiency:*	4. Capital Costs:
·Ext	plain method of determining	
DER	Form 17-1.202(1)	

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				٠.	operating delication	
	7.	Energy:		8.	Maintenance Cost:	
	9.	Emissions:				
		Contaminant			Rate or Concentration	
						•
				_		
_					<del>.</del>	<del></del>
	10.	Stack Parameters				
	<b>a</b> .	Height:	ft.	<b>b.</b>	Diameter:	ft.
	c.	Flow Rate:	AC FH	d.	Temperature:	ef.
	е.	Velocity:	FPS		•	
ε.		cribe the control and treatment to additional pages if necessary).	echn	alag	y available (As many types as	applicable
	1.	•	•			
	a.	Control Device:		ъ.	Operating Principles:	
	c.	Efficiency: 1		đ.	Capital Cost:	
	• .	Useful Life:		f.	Operating Cost:	
	g <b>.</b>	Energy 2		h.	Maintenance Cost:	
	· i.	Availability of construction mate	erial	s an	d process chemicals:	
	j.	Applicability to manufacturing p	toces	ses:	· .	
	ĸ.	Ability to construct with controwithin proposed levels:	l de	vice	, install in available space,	and operat
	2.					
•	a .	Control Device:		٥.	Operating Principles:	
•	e.	Efficiency: 1		d.	Capital Cost:	
	e.	Useful Life:		f.	Operating Cost:	•
	g.	Energy: <sup>2</sup>		ħ.	Maintenance Cost:	
	i.	Availability of construction mat	erial	s an	d process chemicals:	
lex 25n	plai	n method of determining efficiency to be reported in units of elect	y. rical	paw	er – KWH design rate.	
DER	For	m 17-1.202(1)				
			Page	9 of	12	

Applicability to manufacturing processes: Ability to construct with control device, install in available space, and operate within proposed levels: 3. Control Device: Operating Principles: b. Efficiency: 1 c . d. Capital Cost: Useful Life: f. Operating Cost: Energy: 2 Maintenance Cost: h. q. Availability of construction materials and process chemicals: Applicability to manufacturing processes: j. Ability to construct with control device, install in available space, and operate within proposed levels: Δ. Control Device: Operating Principles: Ь. a. Efficiency: 1 c. Capital Costs: Useful Life: Operating Cost: e. Energy: 2 h. Maintenance Cost: q. i. Availability of construction materials and process chemicals: Applicability to manufacturing processes: Ability to construct with control device, install in available space, and operate within proposed levels: Describe the control technology selected: Control Device: 2. Efficiency: 1 1. - 3. Capital Cost: Useful Life: 5. Operating Cost: Energy: 2 7. Maintenance Cost: Manufacturer: Other locations where employed on similar processes: a. (1) Company: (2) Mailing Address: (3) City: (4) State: Explain method of determining efficiency. Energy to be reported in units of electrical power - KWH design rate.

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F.

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Effective November 30, 1982

(5) Environmental Manager:	
(6) Telephone No.:	
(7) Emissions: 1	
Contaminent	Rate or Concentration
(8) Process Rate: 1	•
b. (1) Company:	
(2) Mailing Address:	
(3) City:	(4) State:
(5) Environmental Manager:	
(6) Telephone No.:	
(7) Emissions: 1	
Contaminant	Rate or Concentration
· · · · · · · · · · · · · · · · · · ·	
(8) Process Rate: 1	
10. Reason for selection and description	of systems:
Applicant must provide this information whe available, applicant must state the reason(s	
SECTION VII - PREVENTION O	F SIGNIFICANT DETERIORATION
A. Company Monitored Data -	· · · · · · · · · · · · · · · · · · ·
1 no. sites TSP _	( ) SO <sup>2</sup> + Wind spd/dir
Period of Monitoring / month o	/ to / / lay year month day year
Other data recorded	
Attach all data or statistical summaries	to this application.
Specify bubbler (8) or continuous (C).	
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	2. Instrumentatio	n, Fleta and Laboratory			
	a. Was instrument	ation EPA referenced or i	ts equivalent?	[ ] Yes [ ] N	10
	b. Was instrument	ation calibrated in accor	dance with Depa	ertment procedur	88?
	[ ] Yes [ ] N	o [ ] Unknown			
8.	Meteorological Dat	a Used for Air Quality Mo	deling		
	1Year(s)	of data from / /	year month	/ / day year	
	2. Surface data o	btained from (location)	•		
	3. Upper gir (mix	ing height) data obtained	from (location	n)	
	4. Stability wind	I rose (STAR) data obtaine	d from (location	on)	
c.	Computer Models Us	ed			
	1.	·	Modified?	If yes, attach	description.
	3.		Modified?	If yes, attach	n description.
	· 4		Modified?	If yes, attact	description.
	Attach copies of a ciple output table	ll final model runs showi s.	ng input data,	receptor locati	ions, and prin-
٥.	Applicants Maximum	Allowable Emission Data			
	Pollutant	Emission Rate			
	TSP		gr	ams/sec	
	so <sup>2</sup>		gr	ams/sec	
٤.	Emission Data Used	in Modeling	: i. ·		
		ssion sources. Emission EDS point number), UTM co			

and normal operating time.

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

# ATTACHMENT A. PROCESS DESCRIPTION

## PROCESS DESCRIPTION BUILDING 54

Building 54 is a wafer fabrication facility. The second floor of the two-story building houses two clean room modules. Both fabrication areas employ a series of manufacturing procedures referred to as layering, patterning, doping and heating processes. The frequency and sequence of these processes can vary depending on the desired nature of the final product.

In the controlled environment of the fabrication clean rooms, wafer surfaces first undergo acid and/or solvent cleaning, followed by thermal oxidation in furnaces to form a layer of silicon dioxide on the wafer surface.

During the patterning process, the wafers are initially baked and primed. Coaters then spin a thin layer of "photoresist" on the wafer, after which the wafers are soft baked. Next, the circuit pattern is projected onto the wafers via "alligners" or "steppers." Developers are then applied to remove unpolymerized areas of photoresist. This is followed by a solvent rinse.

Next, the wafers are hard-baked, inspected to determine accuracy, and etched by wet (acid bath) or dry (plasma vapor) mechanisms. Once etching is complete, the photoresist is stripped off the wafer using chemical baths or plasma techniques.

In another step of the fabrication process, "dopant" atoms are either diffused into the wafer in diffusion furnaces, or accelerated into the wafer using "ion implantation." Additional material may be layered on the wafer surface in diffusion, plasma and crystal (epitaxial) deposition furnaces. Metallization to interconnect uppermost circuit layers is performed by deposition (using "sputtering" systems) or evaporation.

Wet stations that house vats containing a variety of acid and caustic compounds are located throughout the clean rooms. Storage cabinets safely hold virgin chemicals until they are ready for use. The first floor of the building contains exhausted gas cabinets that supply process gases to the 'fab' operations.

The exhaust system for the Building is divided into two sections. The west portion of the Building is exhausted to the wet scrubber system F54SO1 at ground level. The east portion of the Building exhaust is ducted to a common line that divides into two wet scrubber systems F54SO3 and F54SO4 located also at ground level (see Attachment E). Also on the east side of building 54 is a non-scrubbed exhaust fan F54E17 that handles air flow from several alligners, furnace source cabinets, and gas cabinets.

## PROCESS DESCRIPTION BUILDING 55

Building 55 is the collection, short term storage, and shipping point for waste chemicals from the various areas of the facility. Activities which are exhausted, involve the handling of empty, capped glass and plastic solvent bottles which are brought to the Building in gondolas or 'bins'.

The Building houses six exhausted wet stations/operations. Two stations are used for acid bottle washing, and another station is used on an 'as needed basis' to control the release of chemicals from broken, deteriorated, or damaged 'bubbler' containers which cannot be safely returned to the vendor. These 'bubblers' supply reactive gases to the chemical vapor deposition process in the wafer fabrication areas (these areas are located in other buildings on the site). Another station is used for a solvent stripper bottle washing. This station is pending approval as an amendment to the permit AC 05-190799.

The Building also houses two bottle crushers for the remaining empty solvent bottles as well as the acid washed and the stripper washed bottles. This operation was a source of fugitive solvent emissions and recently was permitted to be exhausted as an amendment to the permit AC 05-190799.

The above mentioned stations and operations are exhausted to scrubber number F55S01, which is located on the roof of the building. Information on this scrubber is submitted in Attachment D, control equipment information, and in Attachment E, scrubber location maps. The fume scrubber is operating continuously but emissions are exhausted only when there is chemical activity under the hooded wet stations/operations.

The waste solvent chemicals brought to Building 55 are used process chemicals from the manufacturing operations at the plant. The waste solvents are brought in closed containers and are stored as such for a short time prior to lab-packing and disposal offsite. Consequently, this operation produces negligible amounts of emissions.

## PROCESS DESCRIPTION BUILDING 57

The primary manufacturing operations in Building 57 are Soldering and Plating of integrated circuit parts. The Soldering process involves two wave solder machines, a solder bath system, and an aqueous post cleaning system.

The Plating process involves a series of wet stations with acid vats and a water rinse station. No covers are used on the vats. Integrated circuits that previously underwent a baking process are acid etched at an elevated temperature to remove an oxidized layer.

Exhausted equipment includes wave soldering machines, an aqueous post cleaning system, wet stations, chemical storage cabinets, and a degreaser.

Scrubber number F57S01 treats acidic and corrosive contaminated exhaust generated from the above mentioned equipment. The scrubber is located on the roof of the building. Location maps are included in Attachment E of this submittal. Additional information on the scrubber is included in Attachment D.

#### PROCESS DESCRIPTION - BUILDING 59

Building 59 houses a wafer fabrication facility on the first floor. The wafer fabrication area employs a series of manufacturing procedures referred to as layering, patterning, doping, and heating. The frequency and sequence of these processes can vary depending on the desired nature of the final product.

In the controlled environment of the fabrication clean room, wafer surfaces first undergo acid and/or solvent cleaning, followed by thermal oxidation in furnaces to form a layer of silicon dioxide on the wafer surface.

During the patterning process, the wafers are initially baked and primed. Coaters then spin a thin layer of "photoresist" on the wafer, after which the wafers are soft baked. Next, the circuit pattern is projected onto the wafers via "alligners" or "steppers." Developers are then applied to remove unpolymerized areas of photoresist. This is followed by a solvent rinse.

Next, the wafers are hard-baked, inspected to determine accuracy, and etched by wet (acid bath) or dry (plasma vapor) mechanisms. Once etching is complete, the photoresist is stripped off the wafer using chemical baths or plasma techniques. In another step of the fabrication process, "dopant" atoms are either diffused into the wafer in diffusion furnaces, or accelerated into the wafer using "ion implantation." Fumes from the vapor deposition furnaces are oxidized in 'burn boxes.' The oxidized gases are then exhausted to scrubber systems. Additional material may be layered on the wafer surface in vapor and crystal (epitaxial) deposition furnaces. Metallization to interconnect uppermost circuit layers is performed by deposition (using "sputtering" systems) or evaporation. Thirteen exhausted wet stations that house vats containing a variety of acid and caustic compounds are in the fabrication facility. Five of these stations contain solvents; one of which is heated.

To the east of the 'fab' is a probe card repair shop. Four solvent stations are presently employed.

The ground floor houses a process equipment support room that contains gas cabinets, chemical storage cabinets, vacuum pumps and drains. These exhausted units service the process equipment which safely hold virgin chemicals until they are ready for use. Gas cabinets house cylinders that supply process gases to the fab operations. In addition, several waste collection areas are exhausted. The ground floor also houses the site's distilled water plant, and a mechanical equipment storage area.

The aluminum etching equipment of the fab is exhausted to two gas trap units in conjunction with two dry vacuum pumps. The gas traps are located on the ground floor of the Building. The gas traps are the Ebara GTE-3 units along with the Ebara 50x20 Dry Vacuum Pumps (see Attachment D, Control Equipment).

# ATTACHMENT B. AIR EMISSIONS

## SOLVENT MONITORING BUILDING 54, BUILDING 55, BUILDING 59

Solvent monitoring work was performed on the Buildings 54, 55, 57 and 59 scrubber systems in June and October of 1990 and in January of 1991. The tests conducted were EPA Method 25A (flame ionization detection) and EPA Methods 1-4 to measure moisture and flow data for the outlet. The results are included in the following tables of this application submittal.

The monitoring was performed over an 8 hour interval when full production was occurring. The data was corrected for background noise that is normally present in the ambient air. The results were derived using 1990 actual production hours. The actual number of operating hours for calendar year 1991 is recorded monthly for each Building and will be available at the end of the year.

As mentioned in the application section of this submittal, the 1990 and 1991 monitoring data indicate a significant reduction in the VOC/Solvent emissions from Building 54 and higher than expected from Building 57.

Furthermore, based on 1988 monitoring work on a number of scrubbers at this site, it was determined that emissions during non productions hours equaled 18.3% of the emissions occurring during production hours. Emission reduction efforts such as chemical substitutions, shorter times in chemical use, covered solvent baths, etc. showed a reduction in the overall emissions at this site which further indicates the non-production emissions are lower. Assuming 'worst case' conditions, the additional emissions appear to exceed the projected potential emissions for Building 57. The attached tables show the 1990 and 1991 monitored production emissions, the calculated non-production emissions and the combined emissions for Buildings 54 and 57 as well as the latest fugitive emission calculations for Building 55.

Consequently, we request that an additional buffer is considered to accommodate for fluctuations in production activities and chemical usage. In addition, we request for an additional buffer to the air emissions for Building 55. Therefore, we request for the following changes in potential emissions:

An increase of the Building 57 projected potential VOC emissions from 2.0 to 3.0 tons per year. An increase of the Building 55 projected potential VOC emissions from to 0.3 to 1.0 tons per year. A decrease of the Building 54 projected potential VOC emissions from 75.5 to 73.8 tons per year.

The proposed adjustments will not change the overall solvent emissions for the site.

Exhausted equipment on the ground floor and in the wafer fabrication area is ducted to one of two scrubbers; acid vapors are vented to scrubber number F59S01, while solvent exhaust streams are ducted to scrubber number F59S02. Both systems reside on the site grounds directly outside the west wall of the building (see scrubber location maps attached.)

Probe card repair shop equipment is ducted to exhaust fan no. F59E04, which is housed in the building on the ground floor (east side; see location map.)

The Building also houses the Reliability lab on the first floor to the west of the fabrication area. In Reliability, integrated circuits are tested for a wide variety of parameters including tolerance to temperature and humidity changes, endurance, and electrical conductivity. Two solvent stations and four acid stations were added. The wet benches are exhausted to the existing scrubber systems described above.

SUMMARY OF 1990 AND 1991 ANNUAL MONITORING RESULTS ON VOC/SOLVENT EMISSIONS EXPRESSED AS PROPANE. THIS DATA IS BASED ON ACTUAL OPERATING HOURS FOR THE CALLENDAR YEAR 1990. BUILDING 55 FUGITIVE EMISSIONS ARE BASED ON ENGINEERING CALCULATIONS.

		1990 MONIT	ORING EMISSI	ON DATA		
TEST DATE	BLDG #	1990 PRODUCT. SCHEDULE (HRS/YR)	AVG VOC EMISS. (LBS/HR)	PRODUCT. VOC EMISS. (TONS/YR)	NON-PRODUCT VOC EMISS. 18.3% OF PRODUCT. EMISS. (TONS/YR)(1	1990 TOTAL EMISSIONS
		• • •				
06/90	54	6468	5.83	18.85	3.45	22.30
06/90	55	2500	N/A	0.24 (FUG. EMISS.)	N/A	0.24
06/90	57	6936	0.23	0.80	0.15	0.94

		1991 MONITO	RING EMISSI	ON DATA		
		1990			NON-PRODUC VOC EMISS.	Τ.
		PRODUCTION SCHEDULE	AVG VOC EMISSIONS	VOC EMISSIONS	18.3% OF PRODUCT.	1991 TOTAL
				EMISS.	EMISS.	EMISS.
TEST DATE	BLDG #	(HRS/YR)	(LBS/HR)	(TONS/YR)	(TONS/YR)	(10NS/YR)
02/91	54	6468	5.70	18.43	3.37	21.81
02/91	57	6936	0.52	1.80	0.33	2.13

# MAXIMUM ALLOWABLE VOC/SOLVENT EMISSIONS UNDER THE EXISTING CONDITIONS

E	BLDG #	MAX. ALLOWABLE VOC/SOLVENT EMISSIONS (TONS/YR)
	54	75.5
Ę	55	0.3
5	57	2.0
N	NET CHANGE IN MAXI UNDER THE <b>PROPOSE</b>	IMUM ALLOWABLE VOC/SOLVENT EMISSIONS
E	BLDG #	NET CHANGE VOC/SOLVENT EMISSIONS (TONS/YR)
Ę	54	1.7 DECREASE
5	55	0.7 INCREASE
Ę	57	1.0 INCREASE
N	MAXIMUM ALLOWABLE UNDER THE <b>PROPOSE</b>	VOC/SOLVENT EMISSIONS
· E	BLDG #	MAX. ALLOWABLE VOC/SOLVENT EMISSIONS (TONS/YR)
	54	73.8
Ę	55	1.0
Ę	57	3.0

### ACID MONITORING BUILDING 54, BUILDING 55, BUILDING 59

Acid monitoring work was performed on the Buildings 54, 55, 57 and 59 scrubber systems in June of 1990. Samples were collected using modified EPA method 8 sampling train. The impinger solution used to capture the acids was pure distilled water. The analytical methodology utilized to determine the ions of highest concentration is as follows:

Chloride ion--EPA Method 325.3 Fluoride ion--EPA Method 340.2 Nitrate ion--EPA Method 353.2 Phosphorous--EPA Method 365.2 Sulfate ion--EPA Method 375.2

All test results were in pounds per hour as "X", where "X" represents the acid compound present in highest concentration.

The test results are given on the following table and are expressed as hydrochloric, hydrofluoric, nitric, phosphoric and sulfuric acids. The results are based on the actual production schedule for calendar year 1990. The monitoring was performed over an 8 hour time interval when full production was occurring.

When a resulting acid concentration was expressed as a "less than 'y' " value, where 'y' represents the lowest detectable limit possible using the analytical methodology employed, acid emissions were taken to be equal to this 'y' limit value.

The monitoring indicated a significant drop in acid emissions from Building 54 and a higher than the potential emissions from Building 59. Therefore, we request that the following adjustment be considered:

An increase in the Building 59 acid emissions from 0.1 to 0.3 tons per year. A decrease in the Building 54 acid emissions from 9.9 to 9.7 tons per year.

The proposed adjustments will not change the overall acid emissions for the site.

SUMMARY OF 1990 ANNUAL MONITORING RESULTS ON ACID EMISSIONS EXPRESSED AS HCL, HF, HNO3, HPO3 AND H2SO4. THIS DATA IS BASED ON ACTUAL OPERATING HOURS FOR THE CALLENDAR YEAR 1990.

#### 1990 MONITORING EMISSION DATA

TEST DATE	BLDG #	1990 PRODUCTION SCHEDULE (HRS/YR)	AVG ACID EMISSIONS (LBS/HR)	ACID EMISSIONS (TONS/YR)
06/90	54	6468	1.73	5.59
06/90	59	7242	0.05	0.17

## PROJECTED POTENTIAL ACID EMISSIONS UNDER THE **EXISTING CONDITIONS**

	BLDG #	POTENTIAL VOC/SOLVENT EMISSIONS (TONS/YR)
	54	9.9
	59	0.1
	NET CHANGE IN PROJECTED POTENTIAL ACID EMISSIONS UNDER THE PROPOSED CONDITIONS	
	BLDG #	NET CHANGE VOC/SOLVENT EMISSIONS (TONS/YR)
	54	0.2 DECREASE
	59	0.2 INCREASE
	PROJECTED POTENTIAL ACID EMISSIONS UNDER THE PROPOSED CONDITIONS	
-	BLDG #	POTENTIAL VOC/SOLVENT EMISSIONS (TONS/YR)
	54	9.7
	59	0.3

# ATTACHMENT C. RAW MATERIALS & CHEMICALS

## BUILDING 54 PROCESS SOLVENTS

1,1,1 TRIMETHYL-N-TRIMETHYL ETHER 1,1,1 TRICHLOROETHANE 1,2,4 TRICHLOROBENZENE 2-ETHOXYETHYL ACETATE **ACETONE** AROMATIC HYDROCARBON SOLVENT C9-C12 BUTYL CELLOSOLVE CARBON TETRACHLORIDE CELLOSOLVE ACETATE CRESOL DIPROPYLENE GLYCOL METHYL ETHER ETHYL BENZENE FREON 14 FREON 23 FREON TF **HEXAMETHYLDISILIZANE** ISOPARAFFINIC HYDROCARBONS ISOPROPYL ALCOHOL METHANOL N-BUTYL ACETATE N-METHYL-2-PYRROLIDONE OIL OXTYLPHENOL POLYETHOXYLATE PHILTEC SAFETY STAIN PROPYLENE GLYCOL MONOETHYL ETHER ACETATE XYLENE

#### BUILDING 54 PROCESS CHEMICALS

ACETIC ACID ALKYL ARYL SULFONIC ACID ALUMINA SILICA AMMONIA AMMONIUM HYDROXIDE AMMONIUM FLUORIDE CERIC SULFATE CHROMIC ACID DODECYLBENZENE SULFONIC ACID ETHYLENE DIAMINE TETRACETIC ACID (EDTA) ETHYLENE GLYCOL **GLYCERINE** HYDROCHLORIC ACID HYDROFLUORIC ACID HYDROGEN PEROXIDE NITRIC ACID **PHOSPHATE** PHOSPHORIC ACID POTASSIUM HYDROXIDE PROPYLENE CARBONATE SODIUM HYPOPHOSPHITE SODIUM HYDROXIDE SULFURIC ACID TETRAMETHYL AMMONIUM HYDROXIDE

#### BUILDING 54 PROCESS GASES

ARGON ARSINE BORON TRIFLUORIDE BORON TRIBROMIDE BORON TRICHLORIDE CARBON DIOXIDE CHLORINE DE 100 **DIBORANE** DICHLOROSILANE HELIUM **HYDROGEN** HYDROGEN CHLORIDE **NITROGEN** NITROGEN TRIFLUORIDE NITROUS OXIDE OXYGEN PDE 100 **PHOSPHINE** PHOSPHOROUS OXYCHLORIDE PHOSPHOROUS TRIBROMIDE SILANÈ SULFUR HEXAFLUORIDE TUNGSTEN HEXAFLUORIDE

# HARRIS SEMICONDUCTOR BUILDING 55 LIST OF SOLVENTS

1,1,1-TRICHLOROETHANE 1,2,4-TRICHLOROBENZENE 1,2-DICHLOROBENZENE ACETONE CELLOSOLVE ACETATE CRESOL **ETHANOL** ETHYLBENZENE ETHYLENE GLYCOL FREON 113 ISOPROPANOL METHANOL N-BUTYL ACETATE N-METHYL PYRROLIDONE PROPYLENE GLYCOL MONOMETHYL ETHER ACETATE TETRAMETHYL AMMONIUM HYDROXIDE TOLUENE XYLENE HEXAMETHYLDISILAZANE

#### BUILDING 55 PROCESS CHEMICALS

ACETIC ACID

AMMONIUM FLUORIDE

AMMONIUM HYDROXIDE

BORON TRIBROMIDE

HYDROCHLORIC ACID

HYDROFLUORIC ACID

NITRIC ACID

NITROGEN

OXYGEN

PHOSPHORIC ACID

PHOSPHOROUS OXYCHLORIDE

SULFURIC ACID

WASTE ACIDS

WASTE SOLVENTS

WASTE SULFURIC ACID

#### BUILDING 57 PROCESS SOLVENTS

1,1,1 TRICHLOROETHANE

4-METHYL-2,4-PENAHNEDIOL

ACETONE

ALIPHATIC ESTER

ALIPHATIC SOLVENTS

ALKANOLAMINE

ALKYL AMINE

CARBON TETRACHLORIDE

CELLOSOLVE ACETATE

CHLOROFORM

**ETHANOL** 

ETHYL ACETATE

ETHYLENE GLYCOL MONOBUTYL ETHER ACETATE

ETHYLENE GLYCOL MONOETHYL ACETATE

FLUORINERT FC-71

FLUORINERT FC-84

**HEXANE** 

HYDROQUINONE

ISOPROPANOL

METHANOL

METHYLENE CHLORIDE

N-METHYL-2-PYRROLIDONE

ORGANIC SALT

PETROLATUM

PROPYLENE GLYCOL MONOMETHYL ETHER ACETATE

TRICHLOROETHYLENE

TRICHLOROTRIFLUOROETHANE

TRIETHYLENE GLYCOL MONOMETHYL ETHER

TURPENTINE

XYLENE

## BUILDING 57 PROCESS CHEMICALS

**ACTIVATORS** AMINE SALT AMINO ACID CHLORIDE AMMONIUM BIFLUORIDE AMMONIUM CHLORIDE AMMONIUM HYDROXIDE AMMONIUM PHOSPHATE ANTIMONY ANTIOXIDANT BENZOIC ACID BISMUTH BORIC ACID CADMIUM MERCURY SULFIDE CADMIUM SULFOSELENIDE RED CARAMIDE CARBOXYLIC ACID-PHENOL CITRIC ACID CRESOL DIMETHYL PHTHALATE ETHOXYLATED TALL OIL FATTY ACIDS FATTY ACID GLYCERIDES FATTY ACIDS FLUOBORIC ACID FLUORIDE SALT FORMIC ACID GLUTAMATE POLYMER ACTIVATOR GLUTAMATE POLYMER HYDROCHLORIDE GLYCERINE GLYCEROL **GUM RESIN** HYDROCHLORIC ACID HYDROCHLORIDE HYDROFLUORIC ACID HYDROGEN PEROXIDE INDICATING DYE INDIUM INORGANIC CARBONATES INORGANIC OXIDES ISOBUTANE PROPELLANT **ISOPHORONE** JANUS GREEN B LEAD LEAD CHROMATE LEAD SALT LITHIUM SALT METHYL CHLORIDE MONOETHANOLAMINE NITRIC ACID

(CONTINUED)

ORGANIC ACID

#### BUILDING 57 PROCESS CHEMICALS

ZINC CHLORIDE

ORGANIC ACID PHOSPHATE PETROLEUM OIL PHOSPHORIC ACID POLYFUNCTIONAL ACID POTASSIUM 2-CHLORO-4-NITROBENZOATE POTASSIUM BIFLUORIDE POTASSIUM CYANIDE POTASSIUM CYANOAURITE POTASSIUM PENTABORATE POTASSIUM TETRABORATE RESIN ROSIN SILVER SODIUM BICARBONATE SODIUM CARBONATE SODIUM DODECYL SULFATE STANNOUS SULFATE STEARIC ACID SULFATE SULFURIC ACID SURFACTANTS THIOUREA TIN WATER SOLUBLE DISPERANT

#### BUILDING 59 PROCESS SOLVENTS

1,1,1 TRICHLOROETHANE 2-ETHOXYETHYL ACETATE **ACETONE** BUTYL CELLOSOLVE CARBON TETRACHLORIDE CELLOSOLVE ACETATE CHLOROPENTAFLUOROETHANE DICHLORODIFLUOROETHANE ETHYLENE DIAMINE TETRACETIC ACID (ED ETHYL ALCOHOL ETHYL BENZENE ETHYLENE DIAMINE ETHYLENE GLYCOL MONOMETHYL ETHER FLUOROCARBON-72 FREON 5311 FREON TF FREON TMS ISOPROPYL ALCOHOL ISOPARAFFINIC HYDROCARBONS METHANOL METHYL ETHYL KETONE METHYLPHENYL ETHER METHYL-2-PYRROLIDINONE MONOETHANOLAMINE N, N-DIMETHYLFORMAMIDE N-BUTYL ACETATE N-BUTYL ALCOHOL N-METHYL PYRROLIDONE PROPYLENE GLYCOL PROPYLENE GLYCOL 1,2 PROPANEDIOL TOLUENE TRICHLOROTRIFLUOROETHANE XYLENE

#### BUILDING 59 PROCESS CHEMICALS

AMYL ACETATE **AMMONIA** AMMONIUM FLUORIDE AMMONIUM HYDROXIDE BORON NITRIDE ETHYLENE GLYCOL GLYCERINE HYDROCHLORIC ACID HYDROFLUORIC ACID HYDROGEN PEROXIDE MOLYBDENUM DISULFIDE NITRIC ACID PHOSPHORIC ACID POTASSIUM DICHROMATE POTASSIUM PHOSPHATE **RED PHOSPHOROUS** SODIUM CARBONATE SODIUM HYDROXIDE SODIUM PHOSPHATE SULFURIC ACID TETRAETHYL ORTHOSILICATE (TEOS) TETRAMETHYL AMMONIUM HYDROXIDE TRISODIUM PHOSPHITE

#### BUILDING 59 PROCESS GASSES

ARGON BORON TRIBROMIDE BORON TRIFLUORIDE CHLORINE **DICHLOROSILANE** HELIUM **HEXAFLUOROETHANE** HYDROGEN HYDROGEN CHLORIDE NITROGEN NITROGEN TRIFLUORIDE NITROUS OXIDE **OXYGEN** OZONE **PHOSPHINE** PHOSPHOROUS OXYCHLORIDE SILANE SULFUR HEXAFLUORIDE TRIMETHYL BORATE TRIMETHYL PHOSPHATE TUNGSTEN HEXAFLUORIDE

# ATTACHMENT D. CONTROL EQUIPMENT

#### HARRIS SEMICONDUCTOR -- AIR PERMIT INFORMATION

CURRENT PERMIT

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DATE ISSUED : 10/25/88 BUILDING: 54 PERMIT NUMBER: AC 05-147321
PERMIT TYPE : CONSTRUCTION RENEWAL DATE: 08/29/90 DATE EXPIRES: 06/30/91

AREA SERVED: BUILDING 54 WEST SIDE

PROCESS DESCRIPTION: ACID AND VOC/SOLVENT SCRUBBER

BLDG PERMIT INFORMATION SPECIFIC CONDITIONS

VOL. RATE (SCFM): 50,000 ANNUAL OPERATING REPORT: 03/31 ACID MIST(TON/YR): 9.9 NOTIFICATION OF VE TEST: N/A SOLV/VOCS(TON/YR): 75.5 ANNUAL VIS EMISSION TEST: N/A

OPER. (HRS/YEAR): 8760

SCRUBBER INFORMATION \_\_\_\_\_\_

MANUFACTURER: BEVERLY PACIFIC MODEL NUMBER: PS-50HT
SERIAL NUMBER: F-600 MATERIAL: FIBERGLASS REINFORCED

HARRIS ID NUMBER: F54S01 PLASTIC

LOCATION : B54 GROUND NORTHWEST CORNER

DESCRIPTION : HORIZONTAL CROSS FLOW, NON-CLOGGING PVC SPRAY NOZZLES,

2" POLYPROPYLENE PACKING, PVC MIST ELIMINATOR

DESIGN DATA -----

VOLUME FLOW RATE (CFM): 50,000 STACK HEIGHT (FT): 65
RECIRCULATION RATE (GPM): 225 STACK DIAMETER (IN): 54/48
MAKE UP WATER RATE (GPM): 22 STACK VELOCITY (FPM): 3200

PRESSURE DROP (IN): 2.5

ACTUAL DATA \_\_\_\_\_

VOLUME FLOW RATE (CFM): 43,141 PRESSURE DROP (IN): 0.7

RECIRCULATION RATE (GPM): 70 MAKE UP WATER RATE (GPM): 4

DATE: 9/10/91

RECIRCULATION PUMP INFORMATION

MANUFACTURER: FILTER PUMP IND MODEL NUMBER: P-7.5 SERIAL NUMBER: 106001/106002 HP: 7.5 RPM: 3500/2900 BRKR LOCATION: NEXT TO UNIT FED FROM MCC: MCC-P

FAN INFORMATION

HARRIS ID # :

MANUFACTURER: BEVERLY PACIFIC MODEL NUMBER: CB-60

SERIAL NUMBER: F-600 MATERIAL : FIBERG.REINFORCED PLASTIC

DESCRIPTION : CENTRIFUGAL TYPE, CLASS II, BACKWARD INCLINED BLADES

VOLUME FLOW RATE (CFM): 50,000 STATIC PRESS (IN): 5.0

**SPEED (RPM):** 629

ACTUAL DATA

VOLUME FLOW RATE (CFM): 43,141 STATIC PRESS (IN): 1.8

SPEED (RPM) : DATE : 11/6/90

FAN MOTOR INFORMATION

-----

MANUFACTURER:

MODEL NUMBER:

SERIAL NUMBER: HP: 75 SPEED (RPM):

BRKR LOCATION: NEXT TO UNIT FED FROM MCC: 634

PERMIT HISTORY

PERMIT NUMBER: AO 05-65408

DATE EXPIRED: 05/02/88

PERMIT NUMBER: AC 05-147321

DATE EXPIRED: 06/30/91 (SUPERCEDED)

PERMIT NUMBER:

DATE EXPIRED :

PERMIT NUMBER:

DATE EXPIRED :

#### AIR PERMIT INFORMATION HARRIS SEMICONDUCTOR

CURRENT PERMIT

BUILDING: 54 DATE ISSUED: 02/28/91

PERMIT NUMBER: AC 05-190800 RENEWAL DATE:

PERMIT TYPE : CONSTRUCTION DATE EXPIRES: 12/31/91

AREA SERVED: BUILDING 54 EAST SIDE

PROCESS DESCRIPTION: ACID AND VOC/SOLVENT SCRUBBER

BLDG PERMIT INFORMATION SPECIFIC CONDITIONS

ANNUAL OPERATING REPORT: 03/31
NOTIFICATION OF VE TEST: N/A VOL. RATE (SCFM): 17,000 ACID MIST(TON/YR): 9.9 SOLV/VOCS(TON/YR): 75.5 ANNUAL VIS EMISSION TEST: N/A

OPER. (HRS/YEAR): 8760

SCRUBBER INFORMATION

MANUFACTURER : HARRINGTON MODEL NUMBER: ECH 66-9PBS

SERIAL NUMBER: S11164-4 MATERIAL : FIBERGLASS REINFORCED

HARRIS ID NUMBER: F54S02 PLASTIC

LOCATION : B54 GROUND NORTHEAST CORNER, NORTHERNLY POSITION

DESCRIPTION : HORIZONTAL CROSS-FLOW, GLASDEX 12060 PVC PACKING, LIQUID

DISTRIBUTION THROUGH MAIN HEADER, PVC MIST ELIMINATOR

DESIGN DATA -----

VOLUME FLOW RATE (CFM): 17,000 STACK HEIGHT (FT): 65

RECIRCULATION RATE (GPM): 144 STACK DIAMETER (IN): 60/48 MAKE UP WATER RATE (GPM): 10 STACK VELOCITY (FPM): 3400

PRESSURE DROP (IN): 2.0

ACTUAL DATA \_\_\_\_\_

VOLUME FLOW RATE (CFM): 16,000 PRESSURE DROP (IN): 0.7

RECIRCULATION RATE (GPM): 120 MAKE UP WATER RATE (GPM): 6

DATE: 9/10/91

RECIRCULATION PUMP INFORMATION

MANUFACTURER: FILTER PUMP IND MODEL NUMBER: P-6A

FAN INFORMATION

HARRIS ID # : F54E13

MANUFACTURER : HEIL

MODEL NUMBER: 42HBI MATERIAL : FIBERG.REINFORCED PLASTIC SERIAL NUMBER: F-108

DESCRIPTION : CENTRIFUGAL BLOWER, BACKWARD INCLINED BLADES

VOLUME FLOW RATE (CFM): 17,000 STATIC PRESS (IN): 5.0

SPEED (RPM): 790

ACTUAL DATA

VOLUME FLOW RATE (CFM): 16,000 STATIC PRESS (IN): 3.0

SPEED (RPM) : DATE : 6/22/91

FAN MOTOR INFORMATION

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MANUFACTURER: BALDOR IND MOTOR MODEL NUMBER: M41151

BRKR LOCATION: NEXT TO UNIT FED FROM MCC: MCCT-D4

PERMIT HISTORY

PERMIT NUMBER: AO 05-38488 DATE EXPIRED: 04/08/86

PERMIT NUMBER: AO 05-115804

DATE EXPIRED: 05/22/91 (SUPERCEEDED)

PERMIT NUMBER: AC 05-147321

DATE EXPIRED: 06/30/91 (SUPERCEEDED)

PERMIT NUMBER: DATE EXPIRED:

#### HARRIS SEMICONDUCTOR --AIR PERMIT INFORMATION

CURRENT PERMIT

BUILDING: 54 DATE ISSUED : 02/28/91

RENEWAL DATE:

PERMIT NUMBER: AC 05-190800 PERMIT TYPE : CONSTRUCTION DATE EXPIRES: 12/31/91

AREA SERVED: BUILDING 54 EAST SIDE

PROCESS DESCRIPTION: ACID AND VOC/SOLVENT SCRUBBER

BLDG PERMIT INFORMATION SPECIFIC CONDITIONS

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VOL. RATE (SCFM): 30,000 ANNUAL OPERATING REPORT: 03/31
ACID MIST(TON/YR): 9.9 NOTIFICATION OF VE TEST: N/A
SOLV/VOCS(TON/YR): 75.5 ANNUAL VIS EMISSION TEST: N/A

OPER. (HRS/YEAR): 8760

SCRUBBER INFORMATION

MANUFACTURER : BEVERLY PACIFIC MODEL NUMBER : PS-24HT

SERIAL NUMBER: F-600  ${ t MATERIAL}$ : FIBERGLASS REINFORCED

HARRIS ID NUMBER: F54S03 PLASTIC

LOCATION: B54 GROUND NORTHEAST CORNER, SOUTHERLY POSITION

DESCRIPTION : HORIZONTAL CROSS FLOW, NON-CLOGGING PVC SPRAY NOZZLES,

POLYPROPYLENE PACKING, PVC MIST ELIMINATOR

DESIGN DATA

VOLUME FLOW RATE (CFM): 30,000 STACK HEIGHT (FT): 65
RECIRCULATION RATE (GPM): 175 STACK DIAMETER (IN): 60/48
MAKE UP WATER RATE (GPM): 12 STACK VELOCITY (FPM): 3400

PRESSURE DROP (IN): 2

ACTUAL DATA -----

VOLUME FLOW RATE (CFM): 29,000 PRESSURE DROP (IN):

RECIRCULATION RATE (GPM): 165 MAKE UP WATER RATE (GPM): 5

DATE: 9/10/91

RECIRCULATION PUMP INFORMATION

\_\_\_\_\_\_

MCCS-A1

FAN INFORMATION

\_\_\_\_\_ HARRIS ID # :

MANUFACTURER: VIRON MODEL NUMBER: VCF-144

SERIAL NUMBER: 10619 MATERIAL : FIBERG.REINFORCED PLASTIC

DESCRIPTION : CENTIFUGAL TYPE, CLASS II, BACKWARD INCLINED BLADES

VOLUME FLOW RATE (CFM): 30,000 STATIC PRESS (IN): 5.0

SPEED (RPM): 1760

ACTUAL DATA

VOLUME FLOW RATE (CFM): 29,000 STATIC PRESS (IN): 3.0

SPEED (RPM) : DATE : 5/22/91

FAN MOTOR INFORMATION

MANUFACTURER: BALDOR IND. MOTOR MODEL NUMBER:

SERIAL NUMBER: M4110T HP: 40 SPEED (RPM): 1760

BRKR LOCATION: NEXT TO UNIT FED FROM MCC:

PERMIT HISTORY

PERMIT NUMBER: AO 05-38488 DATE EXPIRED: 04/09/81

PERMIT NUMBER: AO 05-115804

DATE EXPIRED: 5/22/91 (SUPERCEDED)

PERMIT NUMBER: AC 05-147321

DATE EXPIRED: 06/30/91 (SUPERCEDED)

PERMIT NUMBER: DATE EXPIRED:

#### HARRIS SEMICONDUCTOR -- ATR PERMIT INFORMATION

CURRENT PERMIT -----

BUILDING: 55

PERMIT NUMBER: AC 05-190799

PERMIT TYPE : CONSTRUCTION

DATE ISSUED : 02/28/91

RENEWAL DATE:

DATE EXPIRES: 12/31/91

AREA SERVED: BUILDING 55

PROCESS DESCRIPTION: ACID AND VOC/SOLVENT SCRUBBER

BLDG PERMIT INFORMATION SPECIFIC CONDITIONS

VOL. RATE (SCFM): 9,500 ANNUAL OPERATING REPORT: 3/31
ACID MIST(TON/YR): 0.1 NOTIFICATION OF VE TEST: N/A
SOLV/VOCS(TON/YR): 0.3 ANNUAL VIS EMISSION TEST: N/A

OPER. (HRS/YEAR): 8760

SCRUBBER INFORMATION \_\_\_\_\_

MANUFACTURER: TRI-MER CORP. MODEL NUMBER: F/W 3 SERIAL NUMBER: 7026 MATERIAL: PVC

HARRIS ID NUMBER: F55S01

LOCATION : B55 ROOF

DESCRIPTION : HORIZONTAL COUNTER-FLOW, MIST ELIMINATOR,

POLYPROPELENE FILTER PACK

DESIGN DATA

VOLUME FLOW RATE (CFM): 9,500 STACK HEIGHT (FT): 12
RECIRCULATION RATE (GPM): 30 STACK DIAMETER (IN): 14
MAKE UP WATER RATE (GPM): 3.0 STACK VELOCITY (FPM):

PRESSURE DROP (IN): 1.5

ACTUAL DATA

VOLUME FLOW RATE (CFM): 7,500 PRESSURE DROP (IN): RECIRCULATION RATE (GPM): 10 MAKE UP WATER RATE (GPM): 8

DATE: 9/29/91

RECIRCULATION PUMP INFORMATION

MANUFACTURER: FLOTEK MODEL NUMBER: C7P3-1194V
SERIAL NUMBER: 603887B801 HP: 2 RPM: 3450/2850
BRKR LOCATION: NEXT TO UNIT FED FROM MCC: CKT 25,27,29

FAN INFORMATION

HARRIS ID # : F55E13

MANUFACTURER: TRI-MER CORP. MODEL NUMBER: 24 UB

SERIAL NUMBER: 7026 MATERIAL : PVC

DESCRIPTION : CENTRIFUGAL BLOWER, BACKWARD INCLINED BLADES

VOLUME FLOW RATE (CFM): 7500 STATIC PRESS (IN): 5

SPEED (RPM): 1789

ACTUAL DATA

VOLUME FLOW RATE (CFM): 7500 STATIC PRESS (IN): 3

SPEED (RPM) : DATE : 9/10/91

FAN MOTOR INFORMATION

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MANUFACTURER: LINCOLN MODEL NUMBER: 254T

BRKR LOCATION: NEXT OT UNIT FED FROM MCC: CKT 7,9,11

PERMIT HISTORY

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PERMIT NUMBER: AC 05-104523 DATE EXPIRED: 06/30/86

PERMIT NUMBER: AC 05-164544

DATE EXPIRED: 06/30/91 (SUPERCEDED)

PERMIT NUMBER: DATE EXPIRED:

PERMIT NUMBER: DATE EXPIRED:

#### HARRIS SEMICONDUCTOR -- AIR PERMIT INFORMATION

CURRENT PERMIT \_\_\_\_\_

BUILDING: 57 DATE ISSUED : 01/11/91

RENEWAL DATE: PERMIT NUMBER: AC 05-189178

PERMIT TYPE : CONSTRUCTION DATE EXPIRES: 12/31/91

AREA SERVED: Building 57

PROCESS DESCRIPTION: ACID AND VOC/SOLVENT SCRUBBER

BLDG PERMIT INFORMATION SPECIFIC CONDITIONS

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VOL. RATE (SCFM): 13,500 ANNUAL OPERATING REPORT: 03/31 ACID MIST(TON/YR): 0.2 NOTIFICATION OF VE TEST: N/A SOLV/VOCS(TON/YR): 2.0 ANNUAL VIS EMISSION TEST: N/A

OPER. (HRS/YEAR): 8760

SCRUBBER INFORMATION

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MANUFACTURER: TRI-MER CORP. MODEL NUMBER: F/W 5 SERIAL NUMBER: 7029
HARRIS ID NUMBER: F57S01 MATERIAL : PVC

HARRIS ID NUMBER: F57S01

LOCATION : B57 ROOF CENTER OF BLDG

DESCRIPTION : HORIZONTAL COUNTER-FLOW, MIST ELIMINATOR,

POLYPRO FILTER PACK

DESIGN DATA

VOLUME FLOW RATE - (CFM): 13,500 STACK HEIGHT (FT): 12 RECIRCULATION RATE (GPM): 36 STACK DIAMETER (IN): 32 MAKE UP WATER RATE (GPM): 2.0 STACK VELOCITY (FPM): 2417

PRESSURE DROP (IN):

ACTUAL DATA

VOLUME FLOW RATE (CFM): 9,328 PRESSURE DROP (IN): 2.8

RECIRCULATION RATE (GPM): 38 MAKE UP WATER RATE (GPM): 4.0

DATE: 09/19/91

RECIRCULATION PUMP INFORMATION

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MANUFACTURER : FLOTEC MODEL NUMBER : C8P8-1194V

SERIAL NUMBER: HP: 1.5 RPM: 3450 BRKR LOCATION: NEXT TO UNIT FED FROM MCC: PP 26

FAN INFORMATION

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HARRIS ID # : F57E03

MANUFACTURER: TRI-MER CORP. MODEL NUMBER: 30 FAN UB

SERIAL NUMBER: 5397 MATERIAL : PVC

DESCRIPTION : CENTRIFUGAL BLOWER, BACKWARD INCLINED BLADES

VOLUME FLOW RATE (CFM): 13,500 STATIC PRESS (IN): 1.7

SPEED (RPM): 1750

ACTUAL DATA

VOLUME FLOW RATE (CFM): 9,328 STATIC PRESS (IN): 1.1

SPEED (RPM) : DATE : 11/06/90

FAN MOTOR INFORMATION

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MANUFACTURER: MODEL NUMBER: 256T

SERIAL NUMBER: R-8361-04-296 HP: 20 SPEED (RPM): 1750

BRKR LOCATION: NEXT TO UNIT FED FROM MCC: PP 26

PERMIT HISTORY

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PERMIT NUMBER: AC 05-104522

DATE EXPIRED: 06/30/86

PERMIT NUMBER: AC 05-161706

DATE EXPIRED: 06/30/91

PERMIT NUMBER:

DATE EXPIRED:

PERMIT NUMBER:

DATE EXPIRED :

#### HARRIS SEMICONDUCTOR -- AIR PERMIT INFORMATION

CURRENT PERMIT

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BUILDING: 59 DATE ISSUED : 08/15/90 PERMIT NUMBER: AC 05-180707 RENEWAL DATE: 06/04/91 PERMIT TYPE : CONSTRUCTION DATE EXPIRES: 12/31/91

AREA SERVED: WAFER FAB AND RELIABILITY, BUILDING 59

PROCESS DESCRIPTION: ACID VAPOR SCRUBBER

BLDG PERMIT INFORMATION SPECIFIC CONDITIONS

VOL. RATE (SCFM): 40,000 ANNUAL OPERATING REPORT: 03/01
ACID MIST(TON/YR): 0.1 NOTIFICATION OF VE TEST: N/A
SOLV/VOCS(TON/YR): 8.4 ANNUAL VIS EMISSION TEST: N/A

OPER. (HRS/YEAR): 8760

SCRUBBER INFORMATION \_\_\_\_\_\_

MANUFACTURER: BEVERLY PACIFIC MODEL NUMBER: PS-40HT SERIAL NUMBER: F-600 MATERIAL : FIBERGLASS

HARRIS ID NUMBER: F59S01

LOCATION : B59 GROUND WEST SIDE

DESCRIPTION : HORIZONTAL CROSS FLOW, NON-CLOGGING PVC SPRAY NOZZLES,

POLYPROPYLENE PACKING, PVC MIST ELIMINATOR, DWG. F-600-1

DESIGN DATA \_\_\_\_\_

VOLUME FLOW RATE (CFM): 40,000 STACK HEIGHT (FT): 35 RECIRCULATION RATE (GPM): 175 STACK DIAMETER (IN): 44 MAKE UP WATER RATE (GPM): 17.5 STACK VELOCITY (FPM):

PRESSURE DROP (IN):

ACTUAL DATA

VOLUME FLOW RATE (CFM): 30,838 PRESSURE DROP (IN): 1.5

RECIRCULATION RATE (GPM): 120 MAKE UP WATER RATE (GPM): 5.0

DATE: 09/19/91

RECIRCULATION PUMP INFORMATION \_\_\_\_\_\_

MANUFACTURER: FILTER PUMP INC MODEL NUMBER: 36E188-105

SERIAL NUMBER: F1280 HP: 3 RPM: 3450 BRKR LOCATION: NEXT TO UNIT FED FROM MCC: 5912

FAN INFORMATION

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HARRIS ID # :

MANUFACTURER: BEVERLY PACIFIC MODEL NUMBER: CB-49

SERIAL NUMBER: F-600 MATERIAL : FIBERGLASS

DESCRIPTION : CENTRIFUGAL TYPE, CLASS II, BACKWARD CURVED BLADES,

DWG. F-600-1

VOLUME FLOW RATE (CFM): 33,384 STATIC PRESS (IN): 5.0

SPEED (RPM): 764

ACTUAL DATA

VOLUME FLOW RATE (CFM): 30,838 STATIC PRESS (IN): 2.8

SPEED (RPM) : DATE : 11/06/90

FAN MOTOR INFORMATION

MANUFACTURER: LINCOLN MODEL NUMBER: 324T

SERIAL NUMBER: HP: SPEED (RPM): 1750

BRKR LOCATION: NEXT TO UNIT FED FROM MCC: 5912, 5913

PERMIT HISTORY

PERMIT NUMBER: AC 05-54991 DATE EXPIRED: 06/01/84

PERMIT NUMBER: AC 05-104516

DATE EXPIRED: 06/30/86

PERMIT NUMBER: AO 05-121924

**DATE EXPIRED** : 09/14/91

PERMIT NUMBER: DATE EXPIRED:

#### HARRIS SEMICONDUCTOR -- AIR PERMIT INFORMATION

CURRENT PERMIT

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BUILDING: 59 DATE ISSUED: 08/15/90 PERMIT NUMBER: AC 05-180707 RENEWAL DATE: 06/04/91 DATE EXPIRES: 12/31/91 PERMIT TYPE : CONSTRUCTION

AREA SERVED: WAFER FAB AND RELIABILITY LAB, BUILDING 59

PROCESS DESCRIPTION: VOC/SOLVENT SCRUBBER

BLDG PERMIT INFORMATION SPECIFIC CONDITIONS

VOL. RATE (SCFM): 20,000 ANNUAL OPERATING REPORT: 03/31
ACID MIST(TON/YR): 0.0228 NOTIFICATION OF VE TEST: N/A
SOLV/VOCS(TON/YR): 1.91 ANNUAL VIS EMISSION TEST: N/A

OPER. (HRS/YEAR): 8760

SCRUBBER INFORMATION \_\_\_\_\_\_

MANUFACTURER: BEVERLY PACIFIC MODEL NUMBER: PS-24VT

SERIAL NUMBER: F-600 MATERIAL : FIBERGLASS

HARRIS ID NUMBER: F59S02

LOCATION : B59 GROUND WEST SIDE

DESCRIPTION : VERTICAL COUNTER-CURRENT, NON-CLOGGING PVC SPRAY NOZZLES,

POLYPROPYLENE PACKING, PVC MIST ELIMINATOR, DWG. F-600-2

DESIGN DATA

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VOLUME FLOW RATE (CFM): 24,000 STACK HEIGHT (FT): 35 RECIRCULATION RATE (GPM): 105 STACK DIAMETER (IN): 42 MAKE UP WATER RATE (GPM): 10.5 STACK VELOCITY (FPM):

PRESSURE DROP (IN):

ACTUAL DATA -----

VOLUME FLOW RATE (CFM): 10,972 PRESSURE DROP (IN): 0.5

RECIRCULATION RATE (GPM): 64 MAKE UP WATER RATE (GPM): 5.0

DATE: 9/19/91

RECIRCULATION PUMP INFORMATION

MANUFACTURER: FILTER PUMP IND MODEL NUMBER: 36E188-105 SERIAL NUMBER: F1280 HP: 3 RPM: 3450 BRKR LOCATION: NEXT TO UNIT FED FROM MCC: 5912

FAN INFORMATION

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HARRIS ID # :

MANUFACTURER: BEVERLY PACIFIC MODEL NUMBER: CB-36

SERIAL NUMBER: F-600 . MATERIAL : FIBERGLASS

DESCRIPTION : CENTRIFUGAL TYPE, CLASS II, BACKWARD CURVED BLADES,

DWG. F-600-2

VOLUME FLOW RATE (CFM): 16,000

SPEED (RPM): 1087

STATIC PRESS (IN): 6.0

ACTUAL DATA

VOLUME FLOW RATE (CFM): 10,972 STATIC PRESS (IN): 5.6

SPEED (RPM)

: 1065

: 11/06/90

FAN MOTOR INFORMATION

MANUFACTURER : LINCOLN

MODEL NUMBER: 284T

SERIAL NUMBER:

SPEED (RPM): 1750

BRKR LOCATION: NEXT TO UNIT

FED FROM MCC: 5912 & 5913

PERMIT HISTORY

PERMIT NUMBER: AC 05-54990 DATE EXPIRED: 06/01/84

PERMIT NUMBER: AC 05-104515

DATE EXPIRED: 06/30/86

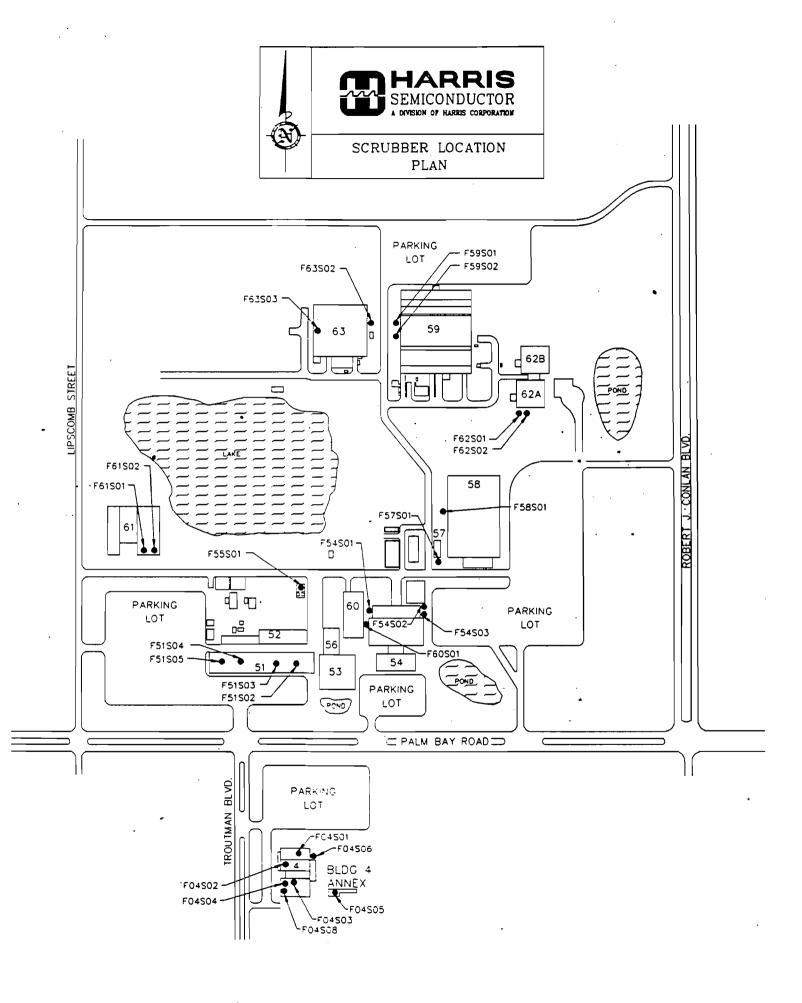
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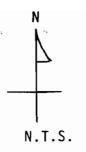
DATE EXPIRED: 09/14/91

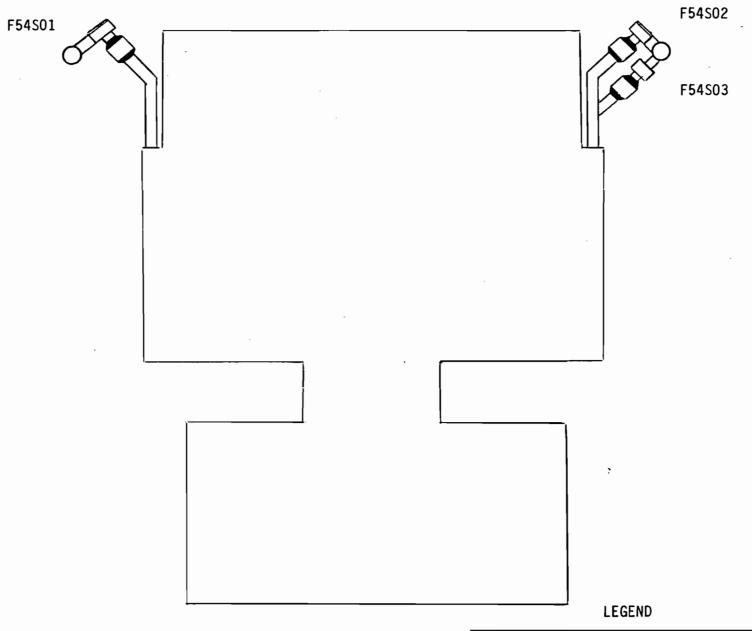
PERMIT NUMBER:

DATE EXPIRED:

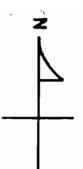
# ATTACHMENT E. LOCATION MAPS







O	- Horizontal Scrubber
	- Vertical Scrubber
0	- Exhaust Stack
	- Exhaust Fan
	- Stack mounted on Fan
0	- Epitaxial Scrubber

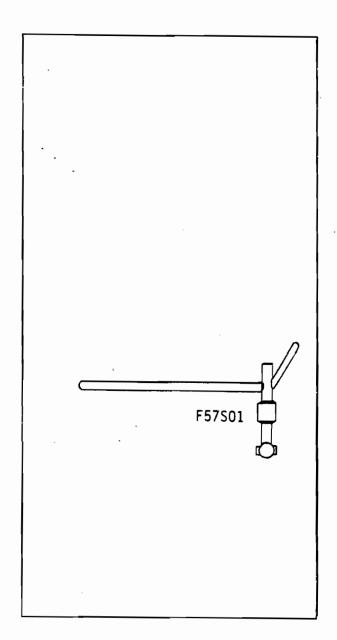


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LEGEND

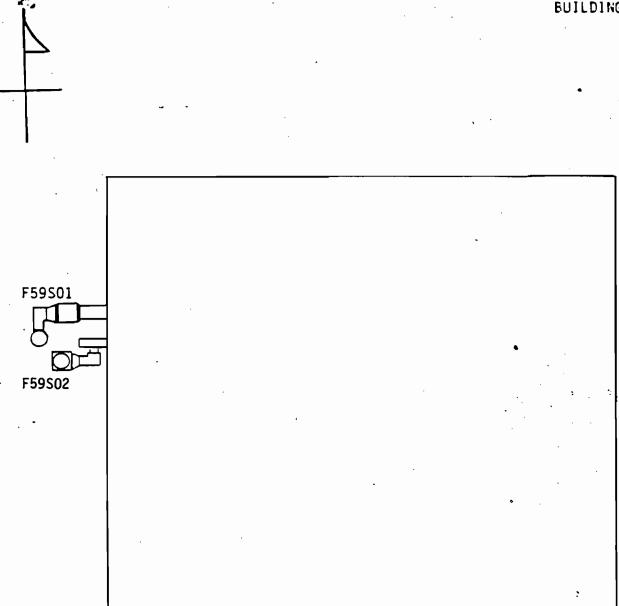
	- Horizontal Scrubber
	- Vertical Scrubber
Ö	- Exhaust Stack
	- Exhaust Fan

HARRI SEMICONDUCTOR SCRUBBER LOCATIONS BUILDING 57



LEGEND

	- Horizontal Scrubber
	- Vertical Scrubber
0	- Exhaust Stack
	- Exhaust Fan
Ö	- Stack mounted on fan
0	- Epitaxial Scrubber



### LEGEND

	- Horizontal Scrubber
	- Vertical Scrubber
0	- Exhaust Stack
	- Exhaust Fan
	- Stack mounted on fan
0	- Epitaxial Scrubber