



**FLORIDA DEPARTMENT OF
ENVIRONMENTAL PROTECTION**
CENTRAL DISTRICT
3319 MAGUIRE BOULEVARD, SUITE 232
ORLANDO, FLORIDA 32803-3767

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SECRETARY

Electronically Sent-Received Receipt Requested
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FINAL PERMIT

PERMITTEE

Harris Corporation
Post Office Box 37, MS 11E-WTP
Melbourne, FL 32902

Authorized Representative:
Mr. Constantine Triantafyllidis, Manager
Environmental Health and Safety

Air Permit No. 0090047-012-AO
Permit Effective Date: 09/16/2014
Permit Expires: 08/30/2019
Site Name: Harris GCS Palm Bay Facility
Minor Source Air Operation Permit
Project Name: Operation Permit Renewal

This is the final air Operation Permit renewal, which renews Operation Permit 0090047-012-AO for the Harris Corporation GCS Palm Bay Facility (Standard Industrial Classification No. 3669). The facility is located in Brevard County at 2400 Palm Bay Road NE, in Melbourne, Florida. The UTM coordinates are Zone 17, 538.9 km East and 3100.6 km North.

This final permit is organized by the following sections:

- Section 1. General Information
- Section 2. Administrative Requirements
- Section 3. Facility-wide and Emissions Unit Specific Conditions
- Section 4. Appendices

Because of the technical nature of the project, the permit contains numerous acronyms and abbreviations, which are defined in Appendix A of Section 4 of this permit.

This air pollution permit is issued under the provisions of: Chapter 403 of the Florida Statutes (F.S.) and Chapters 62-4, 62-204, 62-210, 62-212, 62-296 and 62-297 of the Florida Administrative Code (F.A.C.). The permittee is authorized to conduct the proposed work in accordance with the conditions of this permit. This project is subject to the general preconstruction review requirements in Rule 62-212.300, F.A.C., and is not subject to the preconstruction review requirements for major stationary sources in Rule 62-212.400, F.A.C., for the Prevention of Significant Deterioration (PSD) of Air Quality.

Upon issuance of the final permit, any party to this order has the right to seek judicial review of it under Section 120.68 of the Florida Statutes by filing a notice of appeal under Rule 9.110 of the Florida Rules of Appellate Procedure with the clerk of the Department of Environmental Protection in the Office of General Counsel (Mail Station #35, 3900 Commonwealth Boulevard, Tallahassee, Florida, 32399-3000) 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 must be filed within 30 days after this order is filed with the clerk of the Department.

Executed in Orange County, Florida



F. Thomas Lubozynski, P.E.
Waste and Air Resource Programs Administrator

September 16, 2014
Date

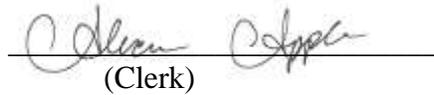
CERTIFICATE OF SERVICE

The undersigned duly designated deputy agency clerk hereby certifies that this Final Air Permit package (including the Final Permit and the Appendices) was sent by electronic mail (or a link to these documents made available electronically on a publicly accessible server) with received receipt requested before the close of business on September 16, 2014 to the persons listed below.

Mr. Constantine Triantafyllidis, Manager, Environmental Health and Safety, Harris Corporation, (ctrianta@harris.com)

Clerk Stamp

FILED, on this date, pursuant to Section 120.52, Florida Statutes, with the designated Department Clerk, receipt of which is hereby acknowledged.



(Clerk)

September 16, 2014
(Date)

SECTION 1. GENERAL INFORMATION (FINAL)

FACILITY AND PROJECT DESCRIPTION

Existing Facility

The existing facility consists of the following emissions unit.

Facility ID No. 0090047	
ID No.	Emission Unit Description
017	Communications Equipment Design and Development

***NOTE:** Please reference Permit No. 0090047-012-AO, Facility ID 0090047, and Emission Unit ID in all correspondence, test report submittals, applications, etc.*

FACILITY REGULATORY CLASSIFICATION

- The facility is not a major source of hazardous air pollutants (HAP).
- The facility has no units subject to the acid rain provisions of the Clean Air Act (CAA).
- The facility is not a Title V major source of air pollution in accordance with Chapter 62-213, F.A.C.
- The facility is not a major stationary source in accordance with Rule 62-212.400, F.A.C., Prevention of Significant Deterioration, F.A.C.
- This facility is a natural minor source of air pollution.

PERMIT HISTORY/AFFECTED PERMITS

This permit renews Air Operation Permit No. 0090047-009-AO, dated October 22, 2009. Since October 22, 2009, the following permit modifications were made:

- Permit Modification No. 0090047-011-AO was a minor modification for the installation of a Tri-Mer single scrubber, addition of a future Wafer Level Processing Lab, and decommissioning of building 12 Acid Etch Facility.
- Construction Permit No. 0090047-010-AC reduced the emission limits of HAPs and VOCs, authorized the construction incorporated in Permit Modification No. 0090047-011-AO, and removed the annual operating report requirement.

SECTION 2. ADMINISTRATIVE REQUIREMENTS (FINAL)

1. Permitting Authority: The permitting authority for this project is the Florida Department of Environmental Protection, Central District Waste & Air Resource Programs. The Central District's mailing address and phone number is:

Florida Department of Environmental Protection
Central District Office
Waste & Air Resource Programs
3319 Maguire Blvd., Ste. 232
Orlando, FL 32803-3767
Telephone: 407-897-4100

All documents related to applications for permits shall be submitted to the above address or electronically to the following address: DEP_CD@dep.state.fl.us. In any electronic submittal clearly identify the Air Permit No. 0090047-012-AO.

2. Compliance Authority: The compliance authority for this project is the Florida Department of Environmental Protection, Central District Compliance Assurance Program. All documents related to compliance activities, such as, reports, tests, and notifications shall be submitted to the Central District Compliance Assurance Program. (Use the above mailing or e-mail address).
3. Appendices: The following Appendices are attached as part of this permit:
 - a. Appendix A. Citation Formats and Glossary of Common Terms;
 - b. Appendix B. General Conditions; and,
 - c. Appendix C. Common Conditions;
4. Applicable Regulations, Forms and Application Procedures: Unless otherwise specified in this permit, the construction of the subject emissions units shall be in accordance with the capacities and specifications stated in the application. The facility is subject to all applicable provisions of: Chapter 403, F.S.; and Chapters 62-4, 62-204, 62-210, 62-212, 62-213, 62-296 and 62-297, F.A.C. Issuance of this permit does not relieve the permittee from compliance with any applicable federal, state, or local permitting or regulations.
5. New or Additional Conditions: For good cause shown and after notice and an administrative hearing, if requested, the Department may require the permittee to conform to new or additional conditions. The Department shall allow the permittee a reasonable time to conform to the new or additional conditions, and on application of the permittee, the Department may grant additional time.
[Rule 62-4.080, F.A.C.]
6. Modifications: Unless otherwise exempt by rule, the permittee shall not initiate any construction, reconstruction, or modification at the facility and shall not install/modify any pollution control device at the facility without obtaining prior authorization from the Department. Modification is defined as: Any physical change or changes in the method of operations or addition to a facility that would result in an increase in the actual emissions of any air pollutant subject to air regulations, including any not previously emitted, from any emission unit or facility.
[Rules 62-210.200 - Definition of "Modification" and 62-210.300(1)(a), F.A.C.]

SECTION 2. ADMINISTRATIVE REQUIREMENTS (FINAL)

7. Operation Permit Renewal Application: A completed application for renewal of the operation permit shall be submitted to the Permitting Authority no later than 60 days prior to the expiration date of the operation permit. To properly apply for an operation permit, the applicant shall submit the following:
- a. the appropriate permit application form (*see current version of Rule 62-210.900, F.A.C. (Forms and Instructions)*), and/or *FDEP Division of Air Resource Management website at: <http://www.dep.state.fl.us/air/>*);
 - b. the appropriate operation permit application fee from Rule 62-4.050(4)(a), F.A.C.; and,
 - c. copies of the most recent two months of records/logs specified in Specific Condition No. **A.6.**

[Rules 62-4.030, 62-4.050, 62-4.070(3), 62-4.090, 62-210.300(2), and 62-210.900, F.A.C.]

SECTION 3. FACILITY WIDE AND EMISSIONS UNIT SPECIFIC CONDITIONS (FINAL)

A. EU No. 017 – Communications Equipment Design and Development

This section of the permit addresses the following emissions unit.

ID No.	Emission Unit Description
017	<u>Communications Equipment Design and Development</u> The facility is involved in the design and development of communications hardware and associated software. Manufacturing operations include surface mount technology of pre-manufactured circuit card assemblies, hardware and component development, plating and etching activities. Work stations which are exhausted from these activities include circuit card assembly cleaning; etching; plating baths; microelectronics and wafer level processing; coating; curing ovens; small-scale chemical mixing stations and hand soldering stations. The plating and wafer level processing operations are equipped with scrubbers and the coating booths are equipped with filters to control particulate emissions.

PERFORMANCE RESTRICTIONS

- A.1. Restricted Operation: The hours of operation are not limited (8,760 hours per year).
[Rules 62-4.070(3) and 62-210. 200(247), “Potential to Emit,” F.A.C.]

- A.2. VOC/Solvent Handling: The permittee shall allow no person to store, pump, handle, load, unload or use in any process or installation, volatile organic compounds (VOC) or organic solvents (OS) without applying known and existing vapor emission control devices or systems deemed necessary and ordered by the Department. To comply, procedures to minimize pollutant emissions shall include the following:
 - a) Tightly cover or close all VOC containers when they are not in use;
 - b) Tightly cover, wherever possible, all open troughs, basins, baths, tanks, etc. when they are not in use;
 - c) Maintain all piping, valves, fittings, etc. in good operating condition;
 - d) Prevent excessive air turbulence across exposed VOCs; and
 - e) Immediately confine and clean up VOC spills and make sure certain wastes are placed in closed containers for reuse, recycling or proper disposal.[Rule 62-296.320(1), F.A.C.]

- A.3. Equipment Relocation: The permittee may relocate the equipment and/or operations within the facility.
[Rule 62-4.070, F.A.C.]

SECTION 3. FACILITY WIDE AND EMISSIONS UNIT SPECIFIC CONDITIONS (FINAL)

A. EU No. 017 – Communications Equipment Design and Development

EMISSIONS STANDARDS

A.4. VOC/HAP Emission Limitation: The facility-wide VOC and HAP emissions shall not exceed the following during any consecutive 12-month period:

Pollutant	Emissions Limitation (tons per any consecutive 12-month period)
Total VOCs	Less than 23.0
Total HAPs	Less than 14.0
Individual HAPs	Less than 7.0

[Construction Permit 0090047-010-AC, dated 09/09/2009, and Rule 62-210. 200(247), “Potential to Emit,” F.A.C.]

A.5. Visible Emissions: Visible emissions for the facility shall not exceed 20% opacity. [Rule 62-296.320(4)(b)1, F.A.C.]

RECORDS AND REPORTS

A.6. Monthly Log: In order to demonstrate compliance with Specific Condition **A.4**, the permittee shall maintain a monthly log at the facility for a period of at least five years from the date the data is recorded. [Rule 62-4.070(3) and Chapter 62-210, F.A.C.]

The monthly summary of the log, at a minimum, shall contain the following:

1. Facility Name, Facility ID No. (i.e., Facility Name, Facility # 0090047);
2. Designation of the month and year of operation for which the records are being tabulated;
3. Consecutive 12-month total of VOC emissions in tons; and,
4. Consecutive 12-month totals of total HAP emissions and for each individual HAP emission.

The monthly logs shall be completed no later than the end of the following month.

Note: A consecutive 12-month total is equal to the total for the month in question plus the totals for the eleven months previous to the month in question. A consecutive 12-month total treats each month of the year as the end of a 12-month period. A 12-month total is not a year-to-date total. Facilities that have not been operating for 12 months should retain 12-month totals using whatever number of months of data is available until such a time as a consecutive 12-month total can be maintained each month.

A.7. Additional Recordkeeping Requirements: Records specified in Specific Condition No. **A.6** must document the method, calculations, and formulas used in determining the usage rate and the emission rate. All calculations, including those used to derive emissions, (for example, the calculations for the VOC content from each VOC containing product used and the calculations for the individual HAP content from each HAP containing product), must be clearly

SECTION 3. FACILITY WIDE AND EMISSIONS UNIT SPECIFIC CONDITIONS (FINAL)

A. EU No. 017 – Communications Equipment Design and Development

documented. The calculations may be presented in the form of a template of sample calculations (for example, a spreadsheet). The documents must be available for review on site by the Department.

[Rule 62-4.070(3), F.A.C.]

- A.8.** Supporting Documentation: Supporting documentation (chemical usage tracking logs, “As Supplied” sheets, Safety Data Sheets, EPA data sheets, purchase orders, waste shipment/disposal records, etc.) shall be kept for each chemical and associated products. The supporting documentation must include sufficient information to determine usage rates and emissions for a minimum of five (5) years. Documentation of each chemical reclaimed will use a mass balance method to determine usage/emissions (amount used minus amount collected for disposal or recycle).

[Rule 62-4.070(3), F.A.C.]

- A.9.** Record Retention: The records required in Specific Conditions No. **A.6, A.7, and A.8** shall be recorded in a permanent form suitable for inspection and made available to the Department upon request. The records shall be maintained onsite for a minimum of five (5) years.

[Rule 62-4.070(3), F.A.C.]

SECTION 4. APPENDICES

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Appendix A. Citation Formats and Glossary of Common Terms

Appendix B. General Conditions

Appendix C. Common Conditions

SECTION 4. APPENDIX A

Citation Formats and Glossary of Common Terms

CITATION FORMATS

The following illustrate the formats used in the permit to identify applicable requirements from permits and regulations.

New Permit Numbers

Example: Permit Nos. 0992222-001-AC, 0992222-001-AF, 0992222-001-AO, or 0992222-001-AV

Where: “099” represents the specific county ID number in which the project is located

“2222” represents the specific facility ID number for that county

“001” identifies the specific permit project number

“AC” identifies the permit as an air construction permit

“AF” identifies the permit as a minor source federally enforceable state operation permit

“AO” identifies the permit as a minor source air operation permit

“AV” identifies the permit as a major Title V air operation permit

Florida Administrative Code (F.A.C.)

Example: [Rule 62-213.205, F.A.C.]

Means: Title 62, Chapter 213, Rule 205 of the Florida Administrative Code

Code of Federal Regulations (CFR)

Example: [40 CFR 60.7]

Means: Title 40, Part 60, Section 7

GLOSSARY OF COMMON TERMS

° F: degrees Fahrenheit

AAQS: Ambient Air Quality Standard

acf: actual cubic feet

acfm: actual cubic feet per minute

ARMS: Air Resource Management System (DEP database)

BACT: best available control technology

bhp: brake horsepower

Btu: British thermal units

CAM: compliance assurance monitoring

CEMS: continuous emissions monitoring system

cfm: cubic feet per minute

CFR: Code of Federal Regulations

CAA: Clean Air Act

CMS: continuous monitoring system

CO: carbon monoxide

CO₂: carbon dioxide

COMS: continuous opacity monitoring system

DARM: Division of Air Resource Management

DEP: Department of Environmental Protection

Department: Department of Environmental Protection

dscf: dry standard cubic feet

dscfm: dry standard cubic feet per minute

EPA: Environmental Protection Agency

SECTION 4. APPENDIX A

Citation Formats and Glossary of Common Terms

ESP: electrostatic precipitator (control system for reducing particulate matter)	PM₁₀: particulate matter with a mean aerodynamic diameter of 10 microns or less
EU: emissions unit	ppm: parts per million
F.A.C.: Florida Administrative Code	ppmv: parts per million by volume
F.A.W.: Florida Administrative Weekly	ppmvd: parts per million by volume, dry basis
F.D.: forced draft	QA: quality assurance
F.S.: Florida Statutes	QC: quality control
FGD: flue gas desulfurization	PSD: prevention of significant deterioration
FGR: flue gas recirculation	psi: pounds per square inch
Fl: fluoride	PTE: potential to emit
ft²: square feet	RACT: reasonably available control technology
ft³: cubic feet	RATA: relative accuracy test audit
gpm: gallons per minute	RBLC: EPA's RACT/BACT/LAER Clearinghouse
gr: grains	SAM: sulfuric acid mist
HAP: hazardous air pollutant	scf: standard cubic feet
Hg: mercury	scfm: standard cubic feet per minute
I.D.: induced draft	SDS: safety data sheets
ID: identification	SIC: standard industrial classification code
kPa: kilopascals	SIP: State Implementation Plan
lb: pound	SNCR: selective non-catalytic reduction (control system used for reducing emissions of nitrogen oxides)
MACT: maximum achievable technology	SO₂: sulfur dioxide
MMBtu: million British thermal units	TPD: tons/day
MW: megawatt	TPH: tons per hour
NESHAP: National Emissions Standards for Hazardous Air Pollutants	TPY: tons per year
NO_x: nitrogen oxides	TRS: total reduced sulfur
NSPS: New Source Performance Standards	UTM: Universal Transverse Mercator coordinate system
O&M: operation and maintenance	VE: visible emissions
O₂: oxygen	VOC: volatile organic compounds
Pb: lead	
PM: particulate matter	

SECTION 4. APPENDIX B

General Conditions

The permittee shall comply with the following general conditions from Rule 62-4.160, F.A.C.

1. The terms, conditions, requirements, limitations and restrictions set forth in this permit, are “permit conditions” and are binding and enforceable pursuant to Sections 403.141, 403.727, or 403.859 through 403.861, F.S. 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 403.987(6) and 403.722(5), F.S., 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 this permit.
4. This permit conveys no title to land or water, does not constitute State recognition or acknowledgment of title, and 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 and used by the permittee to achieve compliance with the conditions of this permit, as required by Department rules. This provision includes the operation of backup or auxiliary facilities or similar systems when necessary to achieve compliance with the conditions of the permit and when required by Department rules.
7. The permittee, by accepting this permit, specifically agrees to allow authorized Department personnel, upon presentation of credentials or other documents as may be required by law and at reasonable times, 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 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:

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General Conditions

- a. A description of and cause of noncompliance; and
 - b. The period of noncompliance, including dates and times; or, if not corrected, the anticipated time the noncompliance is expected to continue, and steps being taken to reduce, eliminate, and prevent recurrence of the noncompliance. 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 403.111 and 403.73, F.S. Such evidence shall only be used to the extent it is consistent with the Florida Rules of Civil Procedure and appropriate evidentiary rules.
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. A reasonable time for compliance with a new or amended surface water quality standard, other than those standards addressed in Rule 62-302.500, F.A.C., shall include a reasonable time to obtain or be denied a mixing zone for the new or amended standard.
11. This permit is transferable only upon Department approval in accordance with Rules 62-4.120 and 62-730.300, 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. This permit also constitutes:
- a. Determination of Best Available Control Technology (not applicable);
 - b. Determination of Prevention of Significant Deterioration (not applicable); and
 - c. Compliance with New Source Performance Standards (not applicable).
14. 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.
 - c. Records of monitoring information shall include:
 - (a) The date, exact place, and time of sampling or measurements;

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- (b) The person responsible for performing the sampling or measurements;
 - (c) The dates analyses were performed;
 - (d) The person responsible for performing the analyses;
 - (e) The analytical techniques or methods used;
 - (f) The results of such analyses.
15. When requested by the Department, the permittee shall within a reasonable time furnish any information required by law which is needed to determine compliance with the permit. If the permittee becomes aware the 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.

SECTION 4. APPENDIX C

Common Conditions

Unless otherwise specified in the permit, the following conditions apply to all emissions units and activities at the facility.

EMISSIONS AND CONTROLS

1. Plant Operation - Problems: If temporarily unable to comply with any of the conditions of the permit due to breakdown of equipment or destruction by fire, wind or other cause, the permittee shall notify each Compliance Authority as soon as possible, but at least within one working day, excluding weekends and holidays. The notification shall include: pertinent information as to the cause of the problem; steps being taken to correct the problem and prevent future recurrence; and, where applicable, the owner's intent toward reconstruction of destroyed facilities. Such notification does not release the permittee from any liability for failure to comply with the conditions of this permit or the regulations. [Rule 62-4.130, F.A.C.]
2. Circumvention: The permittee shall not circumvent the air pollution control equipment or allow the emission of air pollutants without this equipment operating properly. [Rule 62-210.650, F.A.C.]
3. Excess Emissions Allowed: Excess emissions resulting from startup, shutdown or malfunction of any emissions unit shall be permitted providing (1) best operational practices to minimize emissions are adhered to and (2) the duration of excess emissions shall be minimized but in no case exceed 2 hours in any 24-hour period unless specifically authorized by the Department for longer duration. Pursuant to Rule 62-210.700(5), F.A.C., the permit subsection may specify more or less stringent requirements for periods of excess emissions. Rule 62-210-700(Excess Emissions), F.A.C., cannot vary or supersede any federal NSPS or NESHAP provision. [Rule 62-210.700(1), F.A.C.]
4. Excess Emissions Prohibited: Excess emissions caused entirely or in part by poor maintenance, poor operation, or any other equipment or process failure that may reasonably be prevented during startup, shutdown or malfunction shall be prohibited. [Rule 62-210.700(4), F.A.C.]
5. Excess Emissions - Notification: In case of excess emissions resulting from malfunctions, the permittee shall notify the Compliance Authority in accordance with Rule 62-4.130, F.A.C. A full written report on the malfunctions shall be submitted in a quarterly report, if requested by the Department. [Rule 62-210.700(6), F.A.C.]
6. VOC or OS Emissions: No person shall store, pump, handle, process, load, unload or use in any process or installation, volatile organic compounds (VOC) or organic solvents (OS) without applying known and existing vapor emission control devices or systems deemed necessary and ordered by the Department. [Rule 62-296.320(1), F.A.C.]
7. Objectionable Odor Prohibited: No person shall cause, suffer, allow or permit the discharge of air pollutants, which cause or contribute to an objectionable odor. An "objectionable odor" means 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. [Rules 62-296.320(2) and 62-210.200(Definitions), F.A.C.]
8. General Visible Emissions: No person shall cause, let, permit, suffer or allow to be discharged into the atmosphere the emissions of air pollutants from any activity equal to or greater than 20%

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Common Conditions

opacity. This regulation does not impose a specific testing requirement. [Rule 62-296.320(4)(b)1, F.A.C.]

9. Unconfined Particulate Emissions:

- a. No person shall cause, let, permit, suffer or allow the emissions of unconfined particulate matter from any activity, including vehicular movement; transportation of materials; construction, alteration, demolition or wrecking; or industrially related activities such as loading, unloading, storing or handling; without taking reasonable precautions to prevent such emissions.
- b. Any permit issued to a facility with emissions of unconfined particulate matter shall specify the reasonable precautions to be taken by that facility to control the emissions of unconfined particulate matter.
- c. Reasonable precautions include the following:
 - (1) Paving and maintenance of roads, parking areas and yards.
 - (2) Application of water or chemicals to control emissions from such activities as demolition of buildings, grading roads, construction, and land clearing.
 - (3) Application of asphalt, water, oil, chemicals or other dust suppressants to unpaved roads, yards, open stock piles and similar activities.
 - (4) Removal of particulate matter from roads and other paved areas under the control of the owner or operator of the facility to prevent reentrainment, and from buildings or work areas to prevent particulate from becoming airborne.
 - (5) Landscaping or planting of vegetation.
 - (6) Use of hoods, fans, filters, and similar equipment to contain, capture and/or vent particulate matter.
 - (7) Confining abrasive blasting where possible.
 - (8) Enclosure or covering of conveyor systems.

[Rule 62-296.320(4)(c), F.A.C.]

10. Special Compliance Tests. When the Department, after investigation, has good reason (such as complaints, increased visible emissions or questionable maintenance of control equipment) to believe that any applicable emission standard contained in a Department rule or in a permit issued pursuant to those rules is being violated, it shall require the owner or operator of the emissions unit to conduct compliance tests which identify the nature and quantity of pollutant emissions from the emissions unit and to provide a report on the results of said tests to the Department.

[Rule 62-297.310(7), F.A.C.]

RECORDS AND REPORTS

11. Records Retention: All measurements, records, and other data required by this permit shall be documented in a permanent, legible format and retained for at least 3 years following the date on which such measurements, records, or data are recorded, unless otherwise specified by Department rule. Records shall be made available to the Department upon request. [Rule 62-4.160, F.A.C.]

SECTION 4. APPENDIX C

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12. Emissions Computation and Reporting:

- a. *Applicability.* This rule sets forth required methodologies to be used by the owner or operator of a facility for computing actual emissions, baseline actual emissions, and net emissions increase, as defined at Rule 62-210.200, F.A.C., and for computing emissions for purposes of the reporting requirements of subsection 62-210.370(3) and paragraph 62-212.300(1)(e), F.A.C., or of any permit condition that requires emissions be computed in accordance with this rule. This rule is not intended to establish methodologies for determining compliance with the emission limitations of any air permit. [Rule 62-210.370(1), F.A.C.]
- b. *Computation of Emissions.* For any of the purposes set forth in subsection 62-210.370(1), F.A.C., the owner or operator of a facility shall compute emissions in accordance with the requirements set forth in this subsection.
 - (1) **Basic Approach.** The owner or operator shall employ, on a pollutant-specific basis, the most accurate of the approaches set forth below to compute the emissions of a pollutant from an emissions unit; provided, however, that nothing in this rule shall be construed to require installation and operation of any continuous emissions monitoring system (CEMS), continuous parameter monitoring system (CPMS), or predictive emissions monitoring system (PEMS) not otherwise required by rule or permit, nor shall anything in this rule be construed to require performance of any stack testing not otherwise required by rule or permit.
 - (a) If the emissions unit is equipped with a CEMS meeting the requirements of paragraph 62-210.370(2)(b), F.A.C., the owner or operator shall use such CEMS to compute the emissions of the pollutant, unless the owner or operator demonstrates to the department that an alternative approach is more accurate because the CEMS represents still-emerging technology.
 - (b) If a CEMS is not available or does not meet the requirements of paragraph 62-210.370(2)(b), F.A.C., but emissions of the pollutant can be computed pursuant to the mass balance methodology of paragraph 62-210.370(2)(c), F.A.C., the owner or operator shall use such methodology, unless the owner or operator demonstrates to the department that an alternative approach is more accurate.
 - (c) If a CEMS is not available or does not meet the requirements of paragraph 62-210.370(2)(b), F.A.C., and emissions cannot be computed pursuant to the mass balance methodology, the owner or operator shall use an emission factor meeting the requirements of paragraph 62-210.370(2)(d), F.A.C., unless the owner or operator demonstrates to the department that an alternative approach is more accurate.
 - (2) **Continuous Emissions Monitoring System (CEMS).**
 - (a) An owner or operator may use a CEMS to compute emissions of a pollutant for purposes of this rule provided:
 - 1) The CEMS complies with the applicable certification and quality assurance requirements of 40 CFR Part 60, Appendices B and F, or, for an acid rain unit, the certification and quality assurance requirements of 40 CFR Part 75, all adopted by reference at Rule 62-204.800, F.A.C.; or

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- 2) The owner or operator demonstrates that the CEMS otherwise represents the most accurate means of computing emissions for purposes of this rule.
 - (b) Stack gas volumetric flow rates used with the CEMS to compute emissions shall be obtained by the most accurate of the following methods as demonstrated by the owner or operator:
 - 1) A calibrated flow meter that records data on a continuous basis, if available; or
 - 2) The average flow rate of all valid stack tests conducted during a five-year period encompassing the period over which the emissions are being computed, provided all stack tests used shall represent the same operational and physical configuration of the unit.
 - (c) The owner or operator may use CEMS data in combination with an appropriate f-factor, heat input data, and any other necessary parameters to compute emissions if such method is demonstrated by the owner or operator to be more accurate than using a stack gas volumetric flow rate as set forth at subparagraph 62-210.370(2)(b)2., F.A.C., above.
- (3) Mass Balance Calculations.
- (a) An owner or operator may use mass balance calculations to compute emissions of a pollutant for purposes of this rule provided the owner or operator:
 - 1) Demonstrates a means of validating the content of the pollutant that is contained in or created by all materials or fuels used in or at the emissions unit; and
 - 2) Assumes that the emissions unit emits all of the pollutant that is contained in or created by any material or fuel used in or at the emissions unit if it cannot otherwise be accounted for in the process or in the capture and destruction of the pollutant by the unit's air pollution control equipment.
 - (b) Where the vendor of a raw material or fuel which is used in or at the emissions unit publishes a range of pollutant content from such material or fuel, the owner or operator shall use the highest value of the range to compute the emissions, unless the owner or operator demonstrates using site-specific data that another content within the range is more accurate.
 - (c) In the case of an emissions unit using coatings or solvents, the owner or operator shall document, through purchase receipts, records and sales receipts, the beginning and ending VOC inventories, the amount of VOC purchased during the computational period, and the amount of VOC disposed of in the liquid phase during such period.
- (4) Emission Factors.
- a. An owner or operator may use an emission factor to compute emissions of a pollutant for purposes of this rule provided the emission factor is based on site-specific data such as stack test data, where available, unless the owner or operator demonstrates to the department that an alternative emission factor is more accurate. An owner or operator using site-specific data to derive an emission factor, or set of factors, shall meet the following requirements.

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- 1) If stack test data are used, the emission factor shall be based on the average emissions per unit of input, output, or gas volume, whichever is appropriate, of all valid stack tests conducted during at least a five-year period encompassing the period over which the emissions are being computed, provided all stack tests used shall represent the same operational and physical configuration of the unit.
 - 2) Multiple emission factors shall be used as necessary to account for variations in emission rate associated with variations in the emissions unit's operating rate or operating conditions during the period over which emissions are computed.
 - 3) The owner or operator shall compute emissions by multiplying the appropriate emission factor by the appropriate input, output or gas volume value for the period over which the emissions are computed. The owner or operator shall not compute emissions by converting an emission factor to pounds per hour and then multiplying by hours of operation, unless the owner or operator demonstrates that such computation is the most accurate method available.
- b. If site-specific data are not available to derive an emission factor, the owner or operator may use a published emission factor directly applicable to the process for which emissions are computed. If no directly-applicable emission factor is available, the owner or operator may use a factor based on a similar, but different, process.
- (5) Accounting for Emissions During Periods of Missing Data from CEMS, PEMS, or CPMS. In computing the emissions of a pollutant, the owner or operator shall account for the emissions during periods of missing data from CEMS, PEMS, or CPMS using other site-specific data to generate a reasonable estimate of such emissions.
 - (6) Accounting for Emissions During Periods of Startup and Shutdown. In computing the emissions of a pollutant, the owner or operator shall account for the emissions during periods of startup and shutdown of the emissions unit.
 - (7) Fugitive Emissions. In computing the emissions of a pollutant from a facility or emissions unit, the owner or operator shall account for the fugitive emissions of the pollutant, to the extent quantifiable, associated with such facility or emissions unit.
 - (8) Recordkeeping. The owner or operator shall retain a copy of all records used to compute emissions pursuant to this rule for a period of five years from the date on which such emissions information is submitted to the department for any regulatory purpose.

[Rule 62-210.370(2), F.A.C.]

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Common Conditions

c. *Annual Operating Report for Air Pollutant Emitting Facility*

- (1) The Annual Operating Report for Air Pollutant Emitting Facility (DEP Form No. 62-210.900(5)) shall be completed each year for the following facilities:
 - a. All Title V sources.
 - b. All synthetic non-Title V sources.
 - c. All facilities with the potential to emit ten (10) tons per year or more of volatile organic compounds or twenty-five (25) tons per year or more of nitrogen oxides and located in an ozone nonattainment area or ozone air quality maintenance area.
 - d. All facilities for which an annual operating report is required by rule or permit.
- (2) Notwithstanding paragraph 62-210.370(3)(a), F.A.C., no annual operating report shall be required for any facility operating under an air general permit.
- (3) The annual operating report shall be submitted to the appropriate Department of Environmental Protection (DEP) division, district or DEP-approved local air pollution control program office by April 1 of the following year. If the report is submitted using the Department's electronic annual operating report software, there is no requirement to submit a copy to any DEP or local air program office.
- (4) Emissions shall be computed in accordance with the provisions of subsection 62-210.370(2), F.A.C., for purposes of the annual operating report.
- (5) Facility Relocation. Unless otherwise provided by rule or more stringent permit condition, the owner or operator of a relocatable facility must submit a Facility Relocation Notification Form (DEP Form No. 62-210.900(6)) to the Department at least 30 days prior to the relocation. A separate form shall be submitted for each facility in the case of the relocation of multiple facilities which are jointly owned or operated.

[Rule 62-210.370(3), F.A.C.]



**TECHNICAL EVALUATION
&
PRELIMINARY DETERMINATION**

APPLICANT

Harris Corporation
Harris GCS Palm Bay Facility
2400 Palm Bay Road NE
Melbourne, FL 32905

Facility ID No. 0090047

PROJECT

Project No. 0090047-012-AO
Application for Minor Source Air Operation Permit
Project Name: Operation Permit Renewal

COUNTY

Brevard County, Florida

PERMITTING AUTHORITY

Florida Department of Environmental Protection
Waste and Air Resource Programs
Central District Office
Orlando, Florida 32803-3767

September 8, 2014

Prepared by: Kimberly Rush, P.E., Project Engineer

TECHNICAL EVALUATION AND PRELIMINARY DETERMINATION

GENERAL PROJECT INFORMATION

Air Pollution Regulations

Projects at stationary sources with the potential to emit air pollution are subject to the applicable environmental laws specified in Section 403 of the Florida Statutes (F.S.). The statutes authorize the Department of Environmental Protection (Department) to establish regulations regarding air quality as part of the Florida Administrative Code (F.A.C.), which includes the following applicable chapters: 62-4 (Permits); 62-204 (Air Pollution Control – General Provisions); 62-210 (Stationary Sources – General Requirements); 62-212 (Stationary Sources – Preconstruction Review); 62-213 (Operation Permits for Major Sources of Air Pollution); 62-296 (Stationary Sources - Emission Standards); and 62-297 (Stationary Sources – Emissions Monitoring). Specifically, air construction permits are required pursuant to Rules 62-4, 62-210 and 62-212, F.A.C.

In addition, the U. S. Environmental Protection Agency (EPA) establishes air quality regulations in Title 40 of the Code of Federal Regulations (CFR). Part 60 specifies New Source Performance Standards (NSPS) for numerous industrial categories. Part 61 specifies National Emission Standards for Hazardous Air Pollutants (NESHAP) based on specific pollutants. Part 63 specifies NESHAP based on the Maximum Achievable Control Technology (MACT) for numerous industrial categories. The Department adopts these federal regulations on a quarterly basis in Rule 62-204.800, F.A.C.

Glossary of Common Terms

Because of the technical nature of the project, the permit contains numerous acronyms and abbreviations, which are defined in Appendix A of this permit.

I. Project Description:

A. Applicant:

Mr. Constantine Triantafyllidis, Manager, Environmental Health and Safety
Harris Corporation
P.O. Box 37, MS 11E-WTP
Melbourne, FL 32902
ctrianta@harris.com

B. Project Location:

2400 Palm Bay Road NE
Melbourne, Florida 32905

TECHNICAL EVALUATION AND PRELIMINARY DETERMINATION

C. Project Summary:

This project renews Operation Permit 0090047-012-AO for the facility as modified by Permit No. 0090047-011-AO.

D. Application Information:

Application received on: 07/22/2014
Appropriate application fee received on: 07/22/14
1st Request for Additional Information sent on: 08/01/2014
Application Complete Determination: 09/04/2014

III. PSD Applicability for Project

As provided in the application, the total project emissions will not exceed the PSD significant emission rates; therefore, the project is not subject to the PSD preconstruction review.

II. Rule Applicability

This project is subject to the preconstruction review requirements of Chapter 403, Florida Statutes, and Chapters 62-204 through 62-297, Florida Administrative Code (F.A.C.), as indicated below.

Subject to:	Y/N	Comments
Rule 62-210.300, F.A.C. – Stationary Source, General Requirements	Y	Not exempt from general permitting requirements
Rule 62-212.400, F.A.C. – Prevention of Significant Deterioration	N	Facility is not a PSD major source
Rule 62-296.320(4), F.A.C. - General Particulate Emission Limiting Standards	Y	Operations are a potential source of unconfined particulate matter emissions.
Rules 62-296.320(1) and (2), F.A.C. - General Pollutant Emission Limiting Standards (VOCs and Odor)	Y	Circuit Card assembly operations are a potential source of VOCs and odor.
Rule 62-296.400, F.A.C. - Stationary Source Emission Standards	N	There is no applicable source category.
Rule 62-296.500, F.A.C. - Reasonably Available Control Technology (VOC)	N	Brevard County is an attainment area for ozone.
Rule 62-296.700, F.A.C. - Reasonably Available Control Technology (PM)	N	There is no applicable source category.

TECHNICAL EVALUATION AND PRELIMINARY DETERMINATION

Subject to:	Y/N	Comments
Rule 62-204.800, F.A.C. - Standards of Performance for New Stationary Sources (NSPS)	N	There is no applicable source category.
Rule 62-204.800, F.A.C. National Emission Standard for Hazardous Air Pollutants (NESHAPS – 40 CFR 61)	N	There is no applicable source category.
Rule 62-213, F.A.C. – Operation Permits for Major Source of Air Pollution	N	Facility is a natural minor source.

III. Summary of Emissions

As provided by the applicant, emissions from the facility are expected to remain below the following values:

Pollutant	EU No. and brief description	Actual Emissions tons per year (tpy) ^{1, 2}	Allowable Emissions (tpy) ²
VOC	EU 017 – Communications Equipment Manufacturing	9.3	Less than 23
Total HAP	EU 017 – Communications Equipment Manufacturing	0.16	Less than 14
Individual HAP	EU 017 – Communications Equipment Manufacturing	0.04	Less than 7
VE	Facility Wide		Less than twenty percent (20%) opacity

1. *Actual 12-consecutive month emission totals from May 2013 to April 2014 as provided in Application received July 22, 2014.*
2. *The VOC, and HAP limitations were established in Construction Permit 0090047-010-AC, issued 09/09/2009.*

IV. Federal NSPS and/or NESHAP Provisions

There are no applicable federal NSPS or NESHAP provisions.

TECHNICAL EVALUATION AND PRELIMINARY DETERMINATION

V. Conclusions

The emission limits proposed by the applicant will meet all of the requirements of Chapters 62-204 through 297, F.A.C.

The General and Specific Conditions listed in the proposed permit (attached) will assure compliance with all the applicable requirements of Chapters 62-204 through 297, F.A.C.

The site wide emissions unit, EU-017, was renamed from “Government Communications Systems Division” to “Communications Equipment Design and Development” to better describe the emissions unit.

The VE compliance testing required at permit renewal was removed from the permit. Particulate matter is not an expected emission at levels which would yield VE test results at or near 20%. The actual PM emissions for May 2013- April 2014 was 1.805 tons. The 2014 Method 9 VE compliance test reported 100% of observed VE's = 0.

VI. Preliminary Determination

The Department makes a preliminary determination that the proposed project will comply with all applicable state and federal air pollution regulations as conditioned by the draft permit. This determination is based on a technical review of the complete application, reasonable assurances provided by the applicant, and the conditions specified in the draft permit. Additional details of this analysis may be obtained by contacting the project engineer, Kimberly Rush, P.E., at the Florida Department of Environmental Protection, Waste & Air Resource Programs, Central District Office, 3319 Maguire Blvd., Suite 232, Orlando, Florida 32803-3767, 407/897-4100.