FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION
Central District
3319 Maguire Boulevard, Suite 232
Orlando, Florida 32803-3767

RICK SCOTT
GOVERNOR

JENNIFER CARROLL
LT. GOVERNOR

HERSCHEL T. VINYARD JR.
SECRETARY

Electronic Mail – Received Receipt Requested
khazen@henselphelps.com

FINAL PERMIT

PERMITTEE

Hensel Phelps Construction Co.
6557 Hazeltine National Drive, Suite One
Orlando, Florida 32822

Authorized Representative:
Mr. Kirk J. Hazen,
Vice President/District Manager

Air Permit No. 0090239-001-AC
Permit Expires: 06/30/2014
Site Name: Commercial Crew and Cargo Processing Facility (C3PF)
Major Source Air Construction Permit
Project Name: Renovation

This is the final air construction permit, which authorizes construction/renovation/changes to hypergolic liquid processing scrubbers and associated equipment, including plumbing, aspirators, stacks and venting equipment. The proposed work will be conducted at the Commercial Crew and Cargo Processing Facility (known previously as the Orbiter Processing Facility 3 (OPF-3)). The facility (Standard Industrial Classification No. 4789) is located in Brevard County at Kennedy Space Center, Commercial Crew and Cargo Processing Facility (C3PF) in Kennedy Space Center, Florida. The UTM coordinates are Zone 17, 533.925 km East, and 3166.458 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 this 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 — March 14, 2013

F. Thomas Lubozynski, P.E. — Effective Date

Waste & Air Resource Programs Administrator

CERTIFICATE OF SERVICE

The undersigned duly designated deputy agency clerk hereby certifies that this Final Air Permit package (including the Final Determination, 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 March 14, 2013 to the persons listed below:

Mr. Kirk J. Hazen, Vice President/District Manager **(khazen@henselphelps.com)**
Mr. Ryan Danhour, P.E., Hensel Phelps Construction Company **(rdanhour@henselphelps.com)**
Dr. Mitchell Jay Hait, Mitchell J. Hait, Ph.D, P.E., Inc. **(haitinc@gmail.com)**
Ms. Ana M. Oquendo, U.S. EPA Region 4 **(oquendo.ana@epa.gov)**
Ms. Natasha Hazziez, U.S. EPA Region 4 **(hazziez.natasha@epa.gov)**
Ms. Barbara Friday, DEP OPC: **(barbara.friday@dep.state.fl.us)**

Clerk Stamp

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

Tracy L Cooper — March 14, 2013

(Clerk) (Date)

PROPOSED PROJECT

The existing Orbiter Processing Facility 3 (OPF-3) was decommissioned by NASA/KSC and transferred to Space Florida in 2011. The facility is undergoing renovations as it transforms to the Commercial Crew and Cargo Processing Facility (C3PF). The facility is projected to be used by private industry in support of space projects. The conversion from direct NASA operation to private industry is referred to as "commercialization".

This construction permit application is for Hensel Phelps Construction Co. to renovate the two existing hypergolic liquid scrubbers that are used for the following operations:

1) Filling, draining, and venting of the hypergolic fuels and oxidizers in support of operations at the C3PF. Hydrazine and monomethyl hydrazine are typical fuels, and nitrogen tetroxide is a typical oxidizer.

2) Use of aspirators including portable hoses to vacuum possible hypergolic fuel or oxidizer spills, drips, or leaks in the facility. It is currently expected that approximately six aspirators will comprise this venting system; however, the number of aspirators is not limited to provide operational flexibility.

NOTE: *These scrubbers were historically permitted as part of the NASA-KSC Title V facility as part of Emission Unit 089, Hypergol Servicing Operations and Activities.*

The facility consists of the following emissions unit.

Facility ID No. 0090239	
ID No.	Emission Unit Description
001	Hypergolic Servicing Operations and Activities

NOTE: *Please reference the Permit No., Facility ID, 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 a Title V major source of air pollution in accordance with Chapter 213, F.A.C.
- The facility is not a major stationary source in accordance with Rule 62-212.400(PSD), F.A.C.

PERMIT HISTORY/AFFECTED PERMITS

This is the initial air construction permit for this facility. The units (Fuel Scrubber and Oxidizer Scrubber) were previously permitted under Permit No. 0090051-018-AV as part of the NASA-KSC Title V facility.

SECTION 2. ADMINISTRATIVE REQUIREMENTS

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

   Florida Department of Environmental Protection
   Central District Office
   Air Resource Management Section
   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 submittal may be made electronically to DEP_CD@dep.state.fl.us.

2. Compliance Authority: All documents related to compliance activities such as reports, tests, and notifications shall be submitted to the Central District Air Resource Management Section (see above mailing address and phone number).

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 and operation 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(205), (Modification), and 62-210.300(1)(a), F.A.C.]

7. Application for Title V Permit: This permit authorizes construction of the permitted emissions units and initial operation to determine compliance with Department rules. A Title V air operation

permit is required for regular operation of the permitted emissions unit. The permittee shall apply for a Title V air operation permit at least 90 days prior to expiration of this permit, but no later than 180 days after commencing operation. To apply for a Title V operation permit, the applicant shall submit the appropriate application form, compliance test results, and such additional information as the Department may by law require. The application shall be submitted to the appropriate Permitting Authority. **Additionally, the applicant shall submit copies of the most recent two months of records/logs specified in Specific Condition No. A.8.** The records/logs submittal may be made electronically to DEP_CD@dep.state.fl.us.
[Rules 62-4.030, 62-4.050, and 62-4.220, F.A.C.]

8. Annual Operating Report. The permittee shall submit an annual report that summarizes the actual operating rates and emissions from this facility. Annual operating reports (AORs) shall be submitted electronically to the Compliance Authority by April 1st of each year. Go to the following website for the latest information about electronic submittal of AORs:

   http://www.dep.state.fl.us/air/emission/eaor/default.htm

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

   {Permitting Note No. 1: The first AOR for this facility shall be submitted by April 1, 2014.}

A. EU No. 001-Hypergolic Servicing Operations and Activities

ID No.	Emission Unit Description
-001	Hypergolic Servicing Operations and Activities

EQUIPMENT

A.1. Hypergolic Servicing Operations and Activities: The permittee is authorized to construct/renovate/make changes to hypergolic liquid processing scrubbers and associated equipment, including plumbing, aspirators, stacks and venting equipment. [Application No. 0090239-001-AC]

PERFORMANCE RESTRICTIONS

A.2. Restricted Operation: The hours of operation are not limited (8760 hours per year). [Rules 62-4.070(3) and 62-210.200(247), (Potential To Emit), F.A.C.]

A.3. Restricted Operation: The total material throughput limit for hypergol fuel is 21,422 gallons per consecutive 12-month period and 15,647 gallons of oxidizer per consecutive 12-month period. Regarding process cleaning solvent operations, permittee shall comply with either of the following two limits:

a. The total amount of cleaning solvent (including isopropyl alcohol) used for solvent cleaning operations is limited to 1,350 gallons per consecutive 12-month period; or,

b. Total VOC emissions from the process cleaning operations are limited to 4.5 tons per consecutive 12-month period.

[Rules 62-4.070(3) and 62-210.200(247), (Potential To Emit), F.A.C.]

A.4. Circumvention: Emission units and pollution control equipment must be properly operated and maintained by qualified personnel. [Rules 62-210.300(2)(a)2. and 62-210.650, F.A.C.]

{Permitting Note No.2: See Condition No. 2. in Appendix C., Common Conditions.}

A.5. VOC or Organic Solvents (OS) Emissions: The permittee shall not 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 Rule 62-296.320(1)(a), F.A.C., the following procedures shall be utilized to minimize pollutant emissions:

a. Maintain tightly fitting cover, lids, etc. on all containers of VOC when they are not being handled, tapped, etc.;
b. Where possible and practical, procure/fabricate a tightly fitting cover for any open trough, basin, bath, tank etc. of VOC so that it can be covered when not in use;

c. All equipment, fittings, valve lines, pipes, drums, etc. shall be properly operated and maintained;
d. Prevent excessive air turbulence across exposed VOCs; and
e. All VOC spills shall be attended to immediately and the waste properly disposed of, recycled, etc.

[Rule 62-296.320(1)(a), F.A.C.]

EMISSIONS STANDARDS

A.6. Visible Emissions: The visible emission limitation for hypergol servicing operations and activities shall be one hundred (100) percent opacity. [Rule 62-297.310, F.A.C.]

{Permitting Note No. 3: Given the 100 percent VE limit for this emission unit, compliance is inherent. Hence, periodic VE testing is not required.}

NOTIFICATION REQUIREMENTS

A.7. Notification of Initial Startup: The permittee shall submit a written notification to the Compliance Authority of the actual date of initial startup of Emission Unit No. 001 within 15 days after such date. The submittal may be made electronically to DEP_CD@dep.state.fl.us. [Rule 62-4.070(3), F.A.C.]

RECORDS AND REPORTS

A.8. Monthly Recordkeeping: For compliance with Condition No. **A.3.** and Annual Operating Reporting purposes, the following records shall be kept monthly:

a. Facility name, Facility ID No., Emission Unit ID No. and Description (i.e., EU 001, Hypergolic Servicing Operations);
b. Month/Year of record;
c. Quantity of hypergolic fuels and oxidizers processed, including units (e.g. pounds or gallons per month);
d. Consecutive 12-month total of the quantity of hypergolic fuels and oxidizers processed, including units (e.g. pounds or gallons per consecutive 12-month period);
e. Quantity of cleaning solvent (including isopropyl alcohol) used for solvent cleaning operations, including units (e.g. pounds or gallons per month); and
f. Consecutive 12-month total of quantity of cleaning solvent (including isopropyl alcohol) used for solvent cleaning operations, including units (e.g. pounds or gallons per consecutive 12-month period).

g. If the permittee elects to use the VOC emission limit option to comply with Condition No. **A.3.**, then the following records shall be kept monthly:

   i. VOC emissions from process solvent cleaning operations, including units (e.g., pounds or tons per month); and,

   ii. Consecutive 12-month rolling total of VOC emissions from process solvent cleaning operations, including units (e.g., pounds or tons per consecutive 12-month period).

The monthly logs shall be completed by 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 are available until such a time as a consecutive 12-month total can be maintained each month.
[Rule 62-4.070(3), F.A.C.]

A.9. Annual Recordkeeping: For Annual Operating Reporting purposes, the following records shall be kept annually:

a. Facility name, Facility ID No., Emission Unit ID No. and Description (i.e., EU 001, Hypergolic Servicing Operations);

b. Year of record; and

c. Annual total of VOC, total HAP, individual HAP; and NO_x emissions (tons).

The annual logs shall be completed by the end of the current calendar year.

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