



**TECHNICAL EVALUATION  
&  
PRELIMINARY DETERMINATION**

**APPLICANT**

U.S. Air Force  
45 SW/CC, 1201 Edward H. White II Street  
Patrick AFB, Florida 32925-3299

Patrick Air Force Base

Facility ID No. 0090021

**PROJECT**

Project No. 0090021-010-AV  
Application for Major Source Air Operation Permit  
Project Name: Title V Air Operation Permit Renewal and Revision

**COUNTY**

Brevard County, Florida

**PERMITTING AUTHORITY**

Florida Department of Environmental Protection  
Air Resource Management  
Central District Office  
3319 Maguire Blvd., Ste. 232, Orlando, FL 32803-3767

May 24, 2012

Prepared by Jeff Rustin, P.E.

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## TECHNICAL EVALUATION AND PRELIMINARY DETERMINATION

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### 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:

General Anthony J. Cotton, Brigadier General, USAF, Commander  
U.S. Air Force  
45 SW/CC, 1201 Edward H. White II Street  
Patrick AFB, Florida 32925-3299

B. Professional Engineer:

Dr. Mitchell Jay Hait, Ph.D., P.E.  
404 Sebastian Square  
St. Augustine, Florida 32095

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Applicant: U.S. Air Force  
Facility Name: PAFB

Project No. 0090021-010-AV  
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C. Project Location:

Patrick Air Force Base  
45 CES/CEAN, 1224 Jupiter Street, MS 9125  
Patrick Air Force Base, FL 32925-3343

D. Project Summary:

Renewal and Revision of Title V Air Operation Permit, some emission units were removed and other emission units were added (Please see Section IV. Changes to Permit of this Technical Evaluation and Preliminary Determination).

E. Application Information:

Application Received on: 09/15/2011  
Additional Information Requested on: 10/18/2011  
Additional Information Received and application Complete on: 02/23/2012

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
<b>Rule 62-212.400, F.A.C.</b> - Prevention of Significant Deterioration	N	Facility is not a PSD major source.
<b>Rule 62-296.320(4), F.A.C.</b> - General Particulate Emission Limiting Standards	Y	Unconfined particulate matter emissions from vehicular traffic on paved and unpaved roads; and construction activities.
<b>Rules 62-296.320(1) and (2), F.A.C.</b> - General Pollutant Emission Limiting Standards	Y	Facility is a source of VOC.
<b>Rule 62-296.400, F.A.C.</b> - Stationary Source Emission Standards	N	There is no applicable source category.
<b>Rule 62-296.500, F.A.C.</b> - Reasonably Available Control Technology (VOC)	N	Brevard County is an attainment area for ozone.
<b>Rule 62-296.700, F.A.C.</b> - Reasonably Available Control Technology (PM)	N	There is no applicable source category.
<b>Rule 62-204.800, F.A.C.</b> - Standards of Performance for New Stationary Sources (NSPS)	Y	Generators and Engines: 40 CFR Part 60, Subpart A, 40 CFR Part 60, Subparts IIII and JJJJ.

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Subject to:	Y/N	Comments
<b>Rule 62-204.800, F.A.C.</b> National Emission Standard for Hazardous Air Pollutants (NESHAPS – 40 CFR 61)	Y	Asbestos Regulation-Subpart M
<b>Rule 62-204.800, F.A.C.</b> National Emission Standard for Hazardous Air Pollutants for Source Categories a.k.a. MACT (NESHAPS – 40 CFR 63)	Y	Generators and Engines: 40 CFR Part 63, Subpart A and 40 CFR Part 63, Subpart ZZZZ.  Gasoline Dispensing: 40 CFR Part 63, Subpart CCCCCC - Gasoline Dispensing Facilities and 40 CFR  Boilers: Part 63, Subpart JJJJJJ - Industrial, Commercial, and Institutional Boilers.
<b>Chapter 62-213, F.A.C.</b> - Operation Permits for Major Sources of Air Pollution	Y	Facility is a major Title V source.
<b>Rule 62-297.310, F.A.C.</b> - General Compliance Test Requirements, F.A.C.	Y	Compliance Testing for Stage I Vapor Recovery System (Initial Performance Test and Compliance Testing <b>every 3 years thereafter</b> ).

### III. Summary of Emissions

Pollutant	EU No. and brief description	Potential Emissions (tpy)	Allowable Emissions (tpy)
Total HAPS	Facility		22.0
Single HAP	Facility		8.0
VOC	All Permitted Storage Tanks	2.773*	12.0
VOC	Paint Booths		47.0

\* actual emissions for recent 12 consecutive month period (July 2010-June 2011).

### IV. Changes to Permit

The following changes were made as part of this renewal and revision:

- (1) Reformatting to reflect new Title V permit template; moved EU 055 under Subsection A.;
- (2) The addition to EU 032 with the Stage I Vapor Recovery System and modification of the E-85 storage tank authorized by Air Construction Permit No. 0090021-009-AC;
- (3) Removal of four steam boilers (i.e., emissions units (EU) 002, 003, 018, and 019);

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- (4) Addition of four fuel oil-fired steam boilers (i.e., Bldg. 3656 (P3656EC1), Boiler No. 1, Bldg. 632 (P632EC1), Boiler No. 1, Bldg. 691 (P691EC1), Boiler No. 1, and Bldg. 3659 (P3659EC1), Boiler No. 1) under Subsection C.;
- (5) Additional requirements applicable to gasoline dispensing operations were added to the permit under Subsection B.;
- (6) Addition of three (3) new EUs to cover the 32 ICEs, mentioned above, subject to Federal NSPS and NESHAP requirements under Subsection D.; and
- (7) Various changes and additions to Appendix I-1, List of Insignificant Emissions Units and/or Activities.

### V. Federal NSPS and/or NESHAP Provisions

- A. 40 CFR Part 60, Subpart A-General Provisions
- B. 40 CFR Part 60, Subpart IIII-Standards of Performance for Stationary Compression Ignition Internal Combustion Engines
- C. 40 CFR Part 60, Subpart JJJJ-Standards of Performance for Stationary Spark Ignition Internal Combustion Engines
- D. 40 CFR Part 63, Subpart A-General Provisions
- E. 40 CFR Part 63, Subpart CCCCCC-National Emissions Standards for Hazardous Air Pollutants for source Category: Gasoline Dispensing Facility
- F. 40 CFR Part 63, Subpart JJJJJJ-National Emissions Standards for Hazardous Air Pollutants for Industrial, Commercial, and Institutional Boilers Area Sources
- G. 40 CFR Part 63, Subpart ZZZZ-National Emissions Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines

### VI. 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.

### VII. 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 at the Florida Department of Environmental Protection Air Resource Management, Central District, 3319 Maguire Blvd., Ste. 232, Orlando, FL 32803-3767.

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Pursuant to Section 403.087, Florida Statutes and Section 62-4.070, Florida Administrative Code, the Department hereby gives notice of its intent to issue a permit to construct the aforementioned air pollution source in accordance with the draft permit and its conditions as stipulated (see attached).