



**TECHNICAL EVALUATION  
&  
PRELIMINARY DETERMINATION**

**APPLICANT**

U.S. Air Force – Patrick Air Force Base  
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. 0090021-012-AC  
Application for Major Source Air Construction Permit  
Project Name: Air Force Technical Application Center Construction

**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

October 15, 2012

Prepared by Stephen Amirault and Jeffrey Rustin, P.E.

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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:

Robert J. Pavelko, Colonel, USAF, Vice Commander  
U.S. Air Force – Patrick Air Force Base  
45 SW/CC, 1201 Edward H. White II Street  
Patrick AFB, Florida 32925-3299

B. Professional Engineer:

Dr. Mitchell Jay Hait

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Company Name: U.S. Air Force Base- Patrick Air Force Base  
Plant Name: Patrick Air Force Base

Project No. 0090021-011-AC  
Project Name: Air Force Technical  
Application Center Construction

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Mitchell J. Hait, Ph.D., P.E., Inc.  
404 Sebastian Square  
St. Augustine, Florida 32095

C. Project Location:

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

D. Project Summary:

This project which authorizes the installation of three Emergency Generators (included in EU 060) and installation of two, gas-fired boilers (EU063), as further described in the permit.

E. Application Information:

Application Received on: 09/14/2012  
Additional Information Requested on: N/A  
Application Complete: 09/14/2012

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 62-210.300, F.A.C.</b> - Project Not Subject to Prevention of Significant Deterioration or Nonattainment Requirements, F.A.C.	Y	Not exempt from general permitting requirements.
<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 (VOCs and Odor)	N	There is no applicable source category.

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Company Name: U.S. Air Force Base- Patrick Air Force Base  
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Subject to:	Y/N	Comments
<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	The emergency generators and boilers are subject to 40 CFR 60, Subpart IIII and 40 CFR 60, Subpart Dc.
<b>Rule 62-204.800, F.A.C.</b> National Emission Standard for Hazardous Air Pollutants (NESHAPS – 40 CFR 61)	Y	The emergency generators are subject to 40 CFR 63, Subpart ZZZZ.
<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)	N	There is no applicable source category.
<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.	N	Currently a visible emission test is not required.

### III. Summary of Emissions

Pollutant	EU No. and brief description	Potential Emissions (tons per year)	Actual Emissions (tons per year)
PM	EU060	0.67	0.11
	EU063	0.03	0.03
	Total	0.70	0.14
VOC	EU060	0.48	0.08
	EU063	0.14	0.14
	Total	0.62	0.22
NOx	EU060	8.76	1.49
	EU063	6.32	6.32
	Total	15.08	7.81
SO2	EU060	0.05	0.01
	EU063	0.005	0.005
	Total	0.055	0.015

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Pollutant	EU No. and brief description	Potential Emissions (tons per year)	Actual Emissions (tons per year)
CO	EU060	7.36	1.25
	EU063	0.52	0.52
	Total	8.88	1.77
Total HAP	EU060	0.16	0.03
	EU063	0	0
	Total	0.16	0.03
VE	EU060		The limit is less than 20 percent opacity.
	EU063		The limit is less than 20 percent opacity.

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

- A. 40 CFR 60, Subpart A- General Provisions
- B. 40 CFR 60, Subpart Dc- Standards of Performance for Small Industrial-Commercial-Institutional Steam Generating Units
- C. 40 CFR 60, Subpart IIII, Stationary Compression Ignition (CI) Internal Combustion Engines
- D. 40 CFR 63, Subpart A, NESHAP General Provisions
- E. 40 CFR 63, Subpart ZZZZ, Reciprocating Internal Combustion Engines (RICE).

### 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.

### 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,

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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.

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).