



**TECHNICAL EVALUATION
&
PRELIMINARY DETERMINATION**

APPLICANT

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

Cape Canaveral Air Force Station

Facility ID No. 0090005

PROJECT

Project No. 0090005-011-AV
Application for Major Source Air Operation Permit
Project Name: Title V Air Operation Permit Renewal

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

January 24, 2012; Revised January 25 and 26, 2012; Revised March 20 and 22, 2012

Prepared by: Jeff Rustin, P.E.

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:

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:

Brian L. Barfus, P.E.
6520 Bethel Street
Port St. John, Florida 32927

Applicant: U.S. Air Force
Facility Name: Cape Canaveral Air Force Station
Renewal

Project No. 0090005-011-AV
Project Name: Title V Air Operation Permit

TECHNICAL EVALUATION AND PRELIMINARY DETERMINATION

C. Project Location:

Cape Canaveral Air Force Station
Cape Canaveral, Florida

D. Project Summary:

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

E. Application Information:

Application Received on: 07/29/2011
Additional Information Requested on: 09/20/2011
Additional Information Received on: 11/30/2011
Application Complete: 11/30/2011
Comments received from Applicant: 02/14/2012

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
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	Unconfined particulate matter emissions from vehicular traffic on paved and unpaved roads; and construction activities.
Rules 62-296.320(1) and (2), F.A.C. - General Pollutant Emission Limiting Standards	Y	Facility is a source of VOC.
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.
Rule 62-204.800, F.A.C. - Standards of Performance for New Stationary Sources (NSPS)	Y	Generators and Engines: 40 CFR Part 60, Subpart A and 40 CFR Part 60, Subpart III

TECHNICAL EVALUATION AND PRELIMINARY DETERMINATION

Subject to:	Y/N	Comments
Rule 62-204.800, F.A.C. National Emission Standard for Hazardous Air Pollutants (NESHAPS – 40 CFR 61)	Y	Asbestos Regulation-Subpart M
Rule 62-204.800, F.A.C. National Emission Standard for Hazardous Air Pollutants for Source Categories a.k.a. MACT (NESHAPS – 40 CFR 63)	N	Generators and Engines: 40 CFR Part 63, Subpart A and 40 CFR Part 63, Subpart ZZZZ. Five Diesel Fired Boilers subject to 40 CFR Part 63, Subpart A and 40 CFR Part 63, Subpart JJJJJ.
Chapter 62-213, F.A.C. - Operation Permits for Major Sources of Air Pollution	Y	Facility is a major Title V source.
Rule 62-297.310, F.A.C. - General Compliance Test Requirements, F.A.C.	Y	Some visible emission testing required.

III. Summary of Emissions

Pollutant	EU No. and brief description	Potential Emissions (tpy)	Allowable Emissions (tpy)
Total HAPS	Facility	12.239*	24.5**
Single HAP	Facility		9.5**
VOC	EU No. 018 CCAFS Paint Spray Booth #1 equipped with dry paint filters		21.7***
VOC	EU No. 052 CCAFS Paint Spray Booth #5 equipped with dry paint filters		36.3***
Total VOC	Facility	19.692*	
Total CO	Facility	85.60*	
Total NO _x	Facility	148.681*	
Total PM	Facility	60.105*	
Total PM10	Facility	20.598*	
Total SO ₂	Facility	7.196*	

**Note: Based recent Title V renewal application, Emissions Summary for the Permit Renewal. Emissions do not include IC engines using Gasoline and Abrasive Blasting Yards #U1 and #U2. Emissions from these Abrasive Blasting Yards should be primarily particulate matter.*

**HAP Limits established by Construction Permit 0090005-008-AC

***VOC Limits established by Construction Permits AC05-262376 and 0090005-003-AC

TECHNICAL EVALUATION AND PRELIMINARY DETERMINATION

IV. Changes to Permit

The following changes were made as part of this renewal:

- 1) Removal of Emissions Unit Nos. 009, 010, 015, 016, 017, 038, 040, 044, 046, 051, 065 and the associated terms and conditions of these units. Removing Emissions Unit No. 065 also removes the NSPS recordkeeping requirements of 40 CFR Part 60, Subpart Kb.

The emissions units were deleted from the permit because an emissions unit was permanently shutdown or an emissions unit was physically removed from the facility.

- 2) Removal of conditions relating to sulfur content for many of the emission units because those units run only on natural gas now. Corresponding visible emission testing requirements were removed also for the same reason (units run only on natural gas).
- 3) Added Appendix ICE, addresses Internal Combustion Engines and Federal RICE (Reciprocating Internal Combustion engines) Regulations Applicability.
- 4) Added Emission Unit 069 (CCAFS Five Diesel Fired Boilers), previously designated as an insignificant emission unit. Boilers subject to 40 CFR Part 63, Subpart JJJJJJ.
- 5) Deluge pumps subject to Subpart ZZZZ-§63.6640(f)(i),(ii),and(iii) and Table 2d, category No. 4 Maintenance requirements (see Appendix ICE).

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 63, Subpart A-General Provisions
- D. 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.

TECHNICAL EVALUATION AND PRELIMINARY DETERMINATION

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.

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).