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Permittee:

United States Air Force
45 SW/CC, 1201 Edward H. White II St.
Patrick Air Force Base, FL 32925-3299
Attn: Susan J. Helms, Brigadier General,
USAF, Commander

DRAFT Permit No.: 0090021-007-AV

Facility ID No.: 0090021

SIC Nos.: 97

Project: Patrick Air Force Base
Title V Air Operation Permit Renewal

The purpose of this permit is to renew the Title V Air Operation permit for the operation of the Patrick Air Force Base. The facility is classified as a **minor** for HAP emissions and a **major** for non-HAP emissions.

This facility is located at Patrick Air Force Base, Brevard County; UTM Coordinates: Zone 17, 538.8 km East and 3125.8 km North; Latitude: 28° 12' 49" North and Longitude: 80° 36' 19" West.

STATEMENT OF BASIS: This Title V Air Operation Permit Revision is issued under the provisions of Chapter 403, Florida Statutes (F.S.) and Florida Administrative Code (F.A.C.) Chapters 62-4, 62-210, 62-213 and 62-214. The above named permittee is hereby authorized to perform the work or operate the facility shown on the application and approved drawing(s), plans, and other documents, attached hereto or on file with the permitting authority, in accordance with the terms and conditions of this permit.

Referenced attachments made a part of this permit:

Appendix I-1, List of Insignificant Emission Units and/or Activities
Appendix TV-6, TITLE V CONDITIONS

Revision Effective Date:
Renewal Application Due Date:
Expiration Date:

tbd
October 30, 2011
April 30, 2012

STATE OF FLORIDA DEPARTMENT
OF ENVIRONMENTAL PROTECTION

James N. Bradner, P.E.
Program Administrator
Air Resources Management

JNB/azt

Title V Air Operation Permit Renewal

DRAFT Permit No.: 0090021-007-AV

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Section I. Facility Information.

Subsection A. Facility Description.

This is a military facility that contains the following significant air emission units:

a) Steam Boilers as follows:

- Bldg. 314 (P314EC1), Boiler No. 1, Central Heat Plant
- Bldg. 314 (P314EC2), Boiler No. 2, Central Heat Plant
- Bldg. 1380 (P1380EC1), Boiler No. 1
- Bldg. 1380 (P1380EC2), Boiler No. 2

b) Surface Coating Operations, Blast Booth and Petroleum Storage Tanks as follows:

- Bldg. 313 (P313PB1), Spray Booth No. 6
- Bldg. 313, DLM Spray Booth
- Bldg. 331 (P331PB1), Spray Booth No. 5
- Bldg. 511 (P511PB1), Spray Booth No. 1
- Bldg. 511 (P511PB2), Spray Booth No. 2
- Bldg. 630 (P630PB1), Spray Booth No. 4
- Bldg. 313, Abrasive Blast Booth
- Eleven Jet Fuel Storage Tanks (PASJP1)
- Six Diesel/Biodiesel Storage Tanks (PASDJP1)
- Two Gasoline (including ethanol/gasoline blends) Storage Tanks (PASM0G1)

Each spray booth is equipped with dry filters.

Also included in this permit are miscellaneous insignificant emission units and/or activities

Based on the Title V permit application received October 26, 2006, this facility is not a major source of hazardous air pollutants (HAPs).

Subsection B. Summary of Emissions Unit ID No(s). and Brief Description(s).

E.U. ID No./Brief Description

| | |
|-----|--|
| 002 | Bldg. 314 (P314EC1), Boiler No. 1, Central Heat Plant |
| 003 | Bldg. 314 (P314EC2), Boiler No. 2, Central Heat Plant |
| 018 | Bldg. 1380 (P1380EC1), Boiler No. 1 |
| 019 | Bldg. 1380 (P1380EC2), Boiler No. 2 |
| 041 | Bldg. 313 (P313PB1), Spray Booth No. 6 |
| xxx | Bldg. 313, DLM Spray Booth |
| 040 | Bldg. 331 (P331PB1), Spray Booth No. 5 |
| 036 | Bldg. 511 (P511PB1), Spray Booth No. 1 |
| 037 | Bldg. 511 (P511PB2), Spray Booth No. 2 |
| 039 | Bldg. 630 (P630PB1), Spray Booth No. 4 |
| xxx | Bldg. 313, Abrasive Blast Booth |
| 043 | Eleven Jet Fuel Storage Tanks (PASJP1) |
| 043 | Six Diesel/Biodiesel Storage Tanks (PASDJP1) |
| 032 | Two Gasoline (including ethanol/gasoline blends) Storage Tanks (PASM0G1) |

Please reference the Permit No., Facility ID No., and appropriate Emissions Unit(s) ID No(s). on all correspondence, test report submittals, applications, etc.

Subsection C. Relevant Documents.

The documents listed below are not a part of this permit, however, are specifically related to this permitting action.

These documents are provided to the permittee for information purposes only:

Appendix A-1, Abbreviations, Acronyms, Citations, and Identification Numbers

Appendix H-1, Permit History

Statement of Basis

These documents are on file with permitting authority:

Initial Title V Permit Application received June 14, 1996

Initial Title V Operation Permit issued April 14, 1999

Application for a Title V Operation Permit Renewal received October 29, 2001

Title V Operation Permit Renewal issued September 17, 2002

Application for a Title V Operation Permit Renewal received October 26, 2006

Application for a Construction Permit received February 2, 2007

Subsection D. Miscellaneous.

The use of 'Permitting Notes' throughout this permit are for informational purposes only and are not permit conditions.

Section II. Facility-wide Conditions.

The following conditions apply facility-wide:

1. APPENDIX TV-6, TITLE V CONDITIONS, is a part of this permit.
2. General Pollutant Emission Limiting Standards. Objectionable Odor Prohibited. The permittee shall not cause, suffer, allow, or permit the discharge of air pollutants, which cause or contribute to an objectionable odor.
[Rule 62-296.320(2), F.A.C.]
3. General Particulate Emission Limiting Standards. General Visible Emissions Standard. Except for emissions units that are subject to a particulate matter or opacity limit set forth or established by rule and reflected by conditions in this permit, no person shall cause, let, permit, suffer or allow to be discharged into the atmosphere the emissions of air pollutants from any activity, the density of which is equal to or greater than that designated as Number 1 on the Ringelmann Chart (20 percent opacity).
[Rule 62-296.320(4)(b)1., F.A.C.]
4. Prevention of Accidental Releases (Section 112(r) of CAA).
 - a) The permittee shall submit its Risk Management Plan (RMP) to the Chemical Emergency Preparedness and Prevention Office (CEPPO) RMP Reporting Center when, and if, such requirement becomes applicable. Any Risk Management Plans, original submittals, revisions or updates to submittals, should be sent to:
RMP Reporting Center
Post Office Box 1515
Lanham-Seabrook, MD 20703-1515
Telephone: 301/429-5018
 - b) The permittee shall submit to the permitting authority Title V certification forms or a compliance schedule in accordance with Rule 62-213.440(2), F.A.C.
[40 CFR 68]
5. Insignificant Emissions Units and/or Activities. Appendix I-1, List of Insignificant Emissions Units and/or Activities, is a part of this permit.
[Rules 62-213.440(1), 62-213.430(6), and 62-4.040(1)(b), F.A.C.]
6. Unregulated Emissions Units and/or Activities. Appendix U-1, List of Unregulated Emissions Units and/or Activities, is a part of this permit.
7. General Pollutant Emission Limiting Standards. Volatile Organic Compounds (VOC) Emissions or Organic Solvents (OS) Emissions. The permittee shall allow no person to 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. 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, where 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 VOC's,
- e) immediately confine and clean up spills of VOC containing materials.

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

8. Emissions of Unconfined Particulate Matter. Reasonable precautions to prevent emissions of unconfined particulate matter at this facility include:

- a. Chemical or water application to unpaved roads and unpaved yard areas;
- b. Paving and maintenance of roads, parking areas and yards;
- c. Landscaping or planting of vegetation; and
- d. Other techniques, as necessary.

[Rule 62-296.320(4)(c)2., F.A.C.]

9. When appropriate, any recordings, monitoring, or reporting requirements that are time-specific shall be in accordance with the effective date of the permit, which defines day one.

[Rule 62-213.440, F.A.C.]

10. The permittee shall submit all compliance-related notifications and reports required of this permit to the air compliance section of this office:

Florida Department of Environmental Protection
3319 Maguire Blvd., Suite 232
Orlando, Florida 32803
Telephone: 407/893-3336; Fax: 407/897-5963

11. Any reports, data, notifications, certifications, and requests required to be sent to the United States Environmental Protection Agency, Region 4, should be sent to:

United States Environmental Protection Agency
Region 4
Air, Pesticides & Toxics Management Division
Air & EPCRA Enforcement Branch, Air Compliance Section
61 Forsyth Street
Atlanta, Georgia 30303-8960
Telephone: 404/562-9155
Fax: 404/562-9163

12. Annual Statement of Compliance. The annual statement of compliance pursuant to Rule 62-213.440(3)(a)2., F.A.C., shall be submitted to the Department and EPA within 60 (sixty) days after the end of the calendar year using DEP Form No. 62-213.900(7), F.A.C.

[Rules 62-213.440(3) and 62-213.900, F.A.C.]

{Permitting note: This condition implements the requirements of Rules 62-213.440(3)(a)2.&3., F.A.C. (see Condition 51 of APPENDIX TV-6, TITLE V CONDITIONS)}

13. Annual Operating Report. A DEP Form No. 62-210.900(5), "Annual Operating Report for Air Pollutant Emitting Facility", including the Emissions Report, shall be completed for each calendar year, **on or before March 1** of the following year and submitted to the air compliance section of this office. [Rule 62-210.370(3), F.A.C.]

14. Certification by Responsible Official (RO). In addition to the professional engineering certification required for applications by Rule 62-4.050(3), F.A.C., any application form, report, compliance statement, compliance plan and compliance schedule submitted pursuant to Chapter 62-213, F.A.C., shall contain a certification signed by a responsible official that, based on information and belief formed after reasonable inquiry, the statements and information in the document are true, accurate, and complete. Any responsible official who fails to submit any required information or who has submitted incorrect information shall, upon becoming aware of such failure or incorrect submittal, promptly submit such supplementary information or correct information.

[Rule 62.213.420(4), F.A.C.]

15. At least 180 days prior to the expiration date of this operation permit, the permittee shall submit to this office four copies of the air permit application, DEP Form No. 62-210.900(1).

[Rule 62-4.090(1), F.A.C.]

16. The maximum **facility-wide** combined HAP emissions are limited to less than 22.0 tons per any consecutive twelve months and any single HAP emission is limited to less than 8.0 tons per any consecutive twelve months, updated monthly. **These limits are accepted by the applicant to make the facility a synthetic minor for HAPs only.**

[Rule 62-210.300(2)(b)1.d., F.A.C. and FESOP 0090021-005-AF]

17. HAP emissions shall be calculated using the latest published version of appropriate EPA AP42 emission factors, other appropriate emission factors, or material balance.

[FESOP 0090021-005-AF]

Section III. Emissions Unit(s) and Conditions.

Subsection A. This section addresses the following emissions unit(s).

E.U. ID No./ Brief Description

002 Bldg. 314 (P314EC1), Boiler No. 1, Central Heat Plant
003 Bldg. 314 (P314EC2), Boiler No. 2, Central Heat Plant
018 Bldg. 1380 (P1380EC1), Boiler No. 1
019 Bldg. 1380 (P1380EC2), Boiler No. 2

The following conditions apply to the emissions unit(s) listed above:

Essential Potential to Emit (PTE) Parameters

A1. Capacity. The maximum annual (any consecutive twelve month period) heat input shall not exceed 364,416 MMBTU for the four boilers combined.

[Rule 62-210.200, (PTE), F.A.C. and Title V renewal application received October 26, 2006]

A2. Methods of Operation. Each boiler is allowed to fire natural gas only.

[Rule 62.210.200, (PTE), F.A.C. and Title V renewal application received October 26, 2006]

A3. Each unit is allowed to operate a maximum of 8760 hours per consecutive 12-month period.

[Rule 62.210.200, (PTE), F.A.C. and Title V renewal application received October 26, 2006]

Emission Limitations and Standards

A4. BACT Determined by DEP:

The amount of sulfur dioxide emissions from each boiler will be limited by the firing of natural gas.

[Rule 62-296.406(2)&(3), F.A.C. and Title V renewal application received October 26, 2006]

A5. Visible Emissions. Visible emissions shall not exceed 20% opacity except for one two-minute period per hour during which opacity shall not exceed 40%.

[Rule 62-296.406(1), F.A.C.]

Test Methods and Procedures

A6. Each unit shall demonstrate compliance with its visible emission limit in accordance with DEP Method 9 prior to permit expiration date. The test period shall be a minimum of 60 minutes.

[Rules 62-297.401(9)(c), 62-297.310(4)(a)2., 62-297.310(7)(a)4.a., F.A.C.]

A7. At least 15 days prior to the date on which each formal compliance test is due to begin, the permittee shall provide written notification of the test to the air compliance section of this office. The notification must include the following information: the date, time and location of each test; the name and telephone number of the facility's contact person who will be responsible for coordinating the test; and the name, company, and telephone number of the person conducting the test.

[Rule 62-297.310(7)(a)9, F.A.C.]

A8. Testing of emissions shall be conducted with the emissions unit operation at permitted capacity. Permitted capacity is defined as 90 to 100 percent of the maximum operation rate allowed by the permit. If it is impractical to test at permitted capacity, an emissions unit may be tested at less than the minimum permitted capacity; in this case, subsequent emissions unit operation is limited to 110 percent of the test load until a new test is conducted. Once the unit is so limited, operation at higher capacities is allowed for no more than 15 consecutive days for the purpose of additional compliance testing to regain the authority to operate at the permitted capacity.

[Rule 62-297.310(2)& (2) (b), F.A.C.]

A9. By this permit, **annual** emissions compliance testing for visible emissions is not required for these emissions units while burning:

- a. **only** gaseous fuel(s); or
- b. gaseous fuel(s) in combination with any amount of liquid fuel(s) for less than 400 hours per year; or
- c. only liquid fuel(s) for less than 400 hours per year.

[Rule 62-297.310(7)(a)4., F.A.C.]

Monitoring of Operations

A10. Determination of Process Variables.

(a) Required Equipment. The owner or operator of an emissions unit for which compliance tests are required shall install, operate, and maintain equipment or instruments necessary to determine process variables, such as process weight input or heat input, when such data are needed in conjunction with emissions data to determine the compliance of the emissions unit with applicable emission limiting standards.

(b) Accuracy of Equipment. Equipment or instruments used to directly or indirectly determine process variables, including devices such as belt scales, weight hoppers, flow meters, and tank scales, shall be calibrated and adjusted to indicate the true value of the parameter being measured with sufficient accuracy to allow the applicable process variable to be determined within 10% of its true value.

[Rule 62-297.310(5), F.A.C.]

Recordkeeping and Reporting Requirements

A11. In order to demonstrate compliance with conditions no. A1 and A2, the permittee shall maintain a log at the facility for a period of at least 5 years from the date the data are recorded. The log shall contain the following:

Monthly

- a) month
- b) consecutive 12 month
total of:
 - heat inputs
 - fuel type

[Rules 62-4.070(3) and 62-213.440(1)(b)2., F.A.C. and 40 CFR 60.42c(g)&(h)(1)]

A12. Reports of the required test report shall be filed with the air compliance section of this office as soon as practical but no later than 45 days after the last test is completed.

[Rules 62-297.310(8), F.A.C.]

Subsection B. This section addresses the following emissions unit(s).

E.U. ID No./ Brief Description

041 Bldg. 313 (P313PB1), Spray Booth No. 6
xxx Bldg. 313, DLM Spray Booth
040 Bldg. 331 (P331PB1), Spray Booth No. 5
036 Bldg. 511 (P511PB1), Spray Booth No. 1
037 Bldg. 511 (P511PB2), Spray Booth No. 2
039 Bldg. 630 (P630PB1), Spray Booth No. 4

The following conditions apply to the emissions unit(s) listed above:

Essential Potential to Emit (PTE) Parameters

B1. Capacity. The consecutive twelve month amount of HAP containing materials shall be limited to the amount that equates to the specified **facility-wide** HAP emission limitations. [Rule 62-210.200, (PTE), F.A.C. and FESOP 0090021-005-AF]

B2. Capacity. Regarding E.U.s 036, 041, 040, 039, and 037, the total permitted VOC utilization rate shall not exceed 47.0 tons per any consecutive twelve month period, updated monthly. [Rule 62-210.200, (PTE), F.A.C. and Title V application received 10/26/06]

B3. Hours of Operation. Each unit is allowed to operate a maximum of 8760 hours per consecutive twelve months. [Rule 62-210.200, (PTE), F.A.C. and Title V application received 10/26/06]

B4. No person shall circumvent any pollution control device or allow the emissions of air pollutants without the applicable air pollution control device operating properly. [Rule 62-210.200, (PTE), F.A.C. and Rule 62-210.650, F.A.C.]

Emission Limitations and Standards

B5. The total permitted VOC emission rate from the paint booths listed as part of this emission unit shall not exceed 47.0 tons per any consecutive twelve months, updated monthly. [Construction permit 0090021-004-AC]

Recordkeeping and Reporting Requirements

B6. In order to demonstrate compliance with conditions no. B1, B2, and B5, the permittee shall maintain a log at the facility for a period of at least 5 years from the date the data are recorded. The log shall contain the following:

Monthly

- a) month
- b) consecutive 12 month
total of:
 - VOC emission rates
 - single and combined HAP emission rates

[Rules 62-4.070(3), and 62-213.440(1)(b)2., F.A.C. and FESOP 0090021-005-AF]

B7. Supporting documentation, such as Material Safety Data Sheets, purchase orders, etc., shall be kept which includes sufficient information to determine compliance. The log and documents shall be kept at the facility for at least 5 years and made available to the Department. Monthly logs shall be completed by the end of the following month.

[Rules 62-4.070(3), and 62-213.440(1)(b)2.b., F.A.C. and construction permit 0090021-004-AC].

Subsection C. This section addresses the following emissions unit(s).

E.U. ID No./ Brief Description

038 Bldg. 313, Abrasive Blast Booth

The following conditions apply to the emissions unit(s) listed above:

Essential Potential to Emit (PTE) Parameters

C1. Hours of Operation. The unit is allowed to operate a maximum of 8760 hours per consecutive twelve months.

[Rule 62-210.200, (PTE), F.A.C. and Title V application received 10/26/06]

C2. No person shall circumvent any pollution control device or allow the emissions of air pollutants without the applicable air pollution control device operating properly.

[Rule 62-210.200, (PTE), F.A.C. and 62-210.650, F.A.C.]

Subsection D. This section addresses the following emissions unit(s).

E.U. ID No./ Brief Description

- 043 Eleven Jet Fuel Storage Tanks (PASJP1)
- 043 Six Diesel/Biodiesel Storage Tanks (PASDJP1)
- 032 Two Gasoline (including ethanol/gasoline blends) Storage Tanks (PASM0G1)

The following conditions apply to the emissions unit(s) listed above:

D1. Capacity. Regarding the tanks specified by this permit subsection, the total permitted throughput is 1.0 million gallons of gasoline (including ethanol/gasoline blends), 4.0 million gallons of diesel/biodiesel fuel, and 15.5 million gallons of jet fuel per any consecutive twelve months, updated monthly.

[Rule 62-210.200, (PTE), F.A.C. and construction permit 0090021-004-AC]

D2. Hours of Operation. Each unit is allowed to operate a maximum of 8760 hours per consecutive twelve months.

[Rule 62-210.200, (PTE), F.A.C. and construction permit 0090021-004-AC]

D3. The total permitted VOC emissions from the storage tanks shall not exceed 12.0 tons per any consecutive twelve months, updated monthly.

[Construction permit 0090021-008-AC]

D4. In order to demonstrate compliance with conditions no. D1 and D3, the permittee shall maintain a log at the facility for a period of at least 5 years from the date the data is recorded. The log shall contain the following:

Monthly

- a) month
- b) consecutive 12 month

total of:

- material type and throughput for each listed significant storage tank EU ID
- VOC emissions
- single and combined HAP emissions

[Rules 62-4.070(3), and 62-213.440(1)(b)2., F.A.C. and FESOP 0090021-005-AF]

D5. Supporting documentation, such as Material Safety Data Sheets, purchase orders, etc., shall be kept which includes sufficient information to determine compliance. The “Tanks Program version 4.0 or higher” shall be utilized to calculate VOC emissions from the tanks. The log and documents shall be kept at the facility for at least 5 years and made available to the Department. Monthly logs shall be completed by the end of the following month.

[Rules 62-4.070(3), and 62-213.440(1)(b)2.b., F.A.C. and construction permit 0090021-004-AC].