TECHNICAL EVALUATION
AND
PRELIMINARY DETERMINATION

I. GENERAL INFORMATION

A. APPLICANT

United States Marine Corps
USMC Support Facility – Blount Island
5880 Channel View Blvd.
Jacksonville, FL 32226-3404

Draft Permit No.: 0310099-012-AC
County: Duval

B. PROJECT

On May 12, 2011, the United States Marine Corps applied to the Permitting Authority for a permit to construct a new paint and blast facility for the USMC Support Facility – Blount Island. The project will include the demolition of the existing Paint and Blast Building No. 352, which includes the demolition of Emission Unit (EU) No. 001 - Abrasive Blast Booth and the demolition of one paint booth described in EU No. 007 as Spray Coating Booth No.1. The proposed new paint and blast facility will consist of a blast booth, a cure booth (which can also operate as two independent cure booths) and a paint booth (which can also operate as two independent paint booths). The USMC Support Facility – Blount Island is located at 5880 Channel View Blvd., Jacksonville FL 32226-3404.

II. RULE APPLICABILITY

The facility is located in an area designated as unclassifiable for the air pollutants particulate matter less than or equal to ten (10) micrometers and lead; and in an air quality maintenance area for ozone, and in the area of influence of an air quality maintenance area for particulate matter pursuant to Chapter 62-204, Florida Administrative Code (FAC), and Rule 2.201, Jacksonville Environmental Protection Board (JEPB).

The existing facility is not a major stationary source of air pollution for Prevention of Significant Deterioration (PSD) purposes because the potential emissions of PSD air pollutants are less than 250 tons per year pursuant to Rule 62-210.200(189), FAC, and Rule 2.301, JEPB. The facility after completion of this project will not be a major stationary source of air pollution for PSD purposes because the potential emissions of PSD air pollutants will be less than 250 tons per year pursuant to Rule 62-210.200(189), FAC, and Rule 2.301, JEPB.

The facility is a major source of air pollution for Title V purposes because the potential emissions of at least one regulated air pollutant is greater than 100 tons per year pursuant to Rule 62-210.200(188), FAC, and Rule 2.301, JEPB.

The facility is a minor source of Hazardous Air Pollutants (HAP) because the potential emissions of HAP are less than 10 tons per year for any single HAP and less than 25 tons per year for total HAP.

This facility is not subject to 40 CFR 63, Subpart HHHHHH—National Emission Standards for Hazardous Air Pollutants: Paint Stripping and Miscellaneous Surface Coating Operations at Area Sources, since there is an exemption for installations owned or operated by the Armed Forces of the United States.

III. TECHNICAL EVALUATION

Emissions Unit No. 007 – Spray Coating Booths

This emissions unit consists of four (4) spray coating booths for the application of coatings to freight containers (topcoat and primer) and principal end items such as 5-ton trucks, tanks, chassis loading systems, aircraft ground support equipment, and miscellaneous related parts. In addition, the four booths can be used to spray

foam to

produce enclosures for cold weather aircraft ground support equipment. The control devices consist of Spray Coating Booth No. 3: Dry filter system; Spray Coating Booth No. 5: Dry filter system ducted to twelve (12) vents; Spray Coating Booths Nos. 2 and 4 are uncontrolled.

Essential Potential to Emit (PTE) Parameters

This emissions unit is allowed to operate continuously, i.e., 8,760 hours per year.

Emission Limitations and Standards

The maximum allowable VOC emissions shall not exceed 245.0 tons per calendar year. [Applicant's Request]

The maximum allowable HAP emissions shall not exceed 9.5 tons per year for any single HAP and 24.5 tons per year for total HAPs based on a 12-month rolling total. [Applicant's Request]

Test Methods and Procedures

Testing for demonstration of compliance shall be performed in accordance with EPA RM 24 (as described in 40 CFR 60, Appendix A) for VOC. Manufacturer's data sheets with VOC contents may be substituted with the approval of the Permitting Authority.

Recordkeeping and Reporting Requirements

Records shall be maintained on a monthly basis for the following:
a. Coatings usage
b. VOC and Hazardous Air Pollutant (HAP) content (lbs/gal) of coatings as applied
c. Solvent / thinner usage
d. VOC and HAP content of solvent / thinner
e. VOC and HAP emissions

Records shall be maintained for a minimum of five (5) years and made available to the Permitting Authority upon request.

Quarterly reports shall be submitted to the Permitting Authority describing the usage of solvents, coatings, and VOC/HAP contents and emissions. The quarterly reports shall be submitted by the 30th day of the following month after the end of each quarter (January - March, April - June, July - September, and October - December). The final report, which is due by the 30th of January for the quarter of October - December, shall include a synopsis of the preceding year.

Emissions Unit No. 008 – New Abrasive Blast Booth

The primary blast media utilized is aluminum oxide. Steel shot may also be used. Two identical cartridge type dust collectors will be used as control devices.

Essential Potential to Emit (PTE) Parameters

The nominal volumetric flow rate from this emissions unit is 97,000 cubic feet per minute (cfm) for both baghouses (48,500 cfm each). The maximum process rate of abrasive consumed shall not exceed 5 tons per hour. This emissions unit is allowed to operate continuously, i.e., 8,760 hours per year.

Emission Limitations and Standards

Reasonably Available Control Technology (RACT) requirements including **Specific RACT Emission Limiting Standards for Stationary Emission Units** [Rule 62-296.700(3), FAC and Rule 2.1101, JEPB]**; Maximum Allowable Emission Rates** [Rule 62-296.700(4), FAC and Rule 2.1101, JEPB]; **Circumvention** [Rule 62-296.700(5), FAC and Rule 2.1101, JEPB], and **Operation and Maintenance Plan** [Rule 62-296.700(6), FAC and Rule 2.1101, JEPB] shall apply to this emission unit.

Particulate Matter emissions shall not exceed 0.03 grains per dry standard cubic feet [24.94 pounds per hour and 109.24 tons per year (total for both dust collectors)].

Visible emissions (VE) shall not exceed 5 percent opacity for each dust collector.

Test Methods and Procedures

Testing for demonstration of compliance shall be performed in accordance with EPA Reference Method (RM) 5 (as described in 40 CFR 60, Appendix A) for particulate matter.

Initial PM testing shall be conducted for each dust collector a minimum of 135 days prior to the expiration date of this permit. The minimum sample volume shall be 30 dry standard cubic feet.

Testing for demonstration of compliance shall be performed in accordance with EPA RM 9 (as described in 40 CFR 60, Appendix A) for the visual determination of opacity.

Initial VE testing shall be conducted for each dust collector a minimum of 135 days prior to the expiration date of this permit. The minimum period of observation shall be 30 minutes.

A Compliance Assurance Monitoring (CAM) determination shall be made after review of stack testing data and any other relevant information available on this emission unit. It is noted that uncontrolled PM emission data may be required to determine CAM applicability. Conduct PM stack testing accordingly.

Reporting and Recordkeeping Procedures

An Operation and Maintenance Plan shall be attached to and shall be part of this permit. All activities shall be performed as scheduled and recorded. Data shall be made available to the Permitting Authority upon request. Records shall be maintained on file for a minimum period of two (2) years.

IV. CONCLUSION

Based upon information provided by the United States Marine Corps, USMC Support Facility – Blount Island, the Permitting Authority has reasonable assurance that the proposed construction/modification as described in this evaluation and subject to the conditions proposed herein, will not cause, or contribute to a violation of any ambient air quality standard or other technical provision of Chapters 62-296 and 62-297, FAC, JEPB Rules 2.1101 and 2.1201.