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.: 0310099-014-AC
County: Duval

B. PROJECT

On November 10, 2011, the United States Marine Corps applied to the Permitting Authority for a permit to construct a concrete batch plant to be located at the USMC Support Facility – Blount Island. The plant is a central mix plant, Rexcon Logo 10 with a maximum rated capacity of 160 cubic yards per hour. The plant will have one overhead split silo (2/3 cement and 1/3 fly ash) and four bulk storage bins. The plant will have a central dust collection system (C&W RA 140) which will collect the cement and fly ash dust from all controlled emission points. The plant is expected to produce 55,000 cubic yards of concrete annually. 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, 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, FAC, and Rule 2.301, JEPB.

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

III. TECHNICAL EVALUATION

Emissions Unit No. 010 – Concrete Batch Plant

This emission unit consists of a temporary portable concrete batch plant for the production of concrete. The particulate matter emissions will be controlled using a central dust collection system.

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 annual production rate shall not exceed 55,000 cubic yards of concrete.

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.

Chapter 62-296 Stationary Sources - Emissions Standards; Rule 62-296.414, FAC, Concrete Batching Plants, and Rule 2.1101, JEPB shall apply to this emission unit.

Emissions from silos, weigh hoppers (batchers), and other enclosed storage and conveying equipment shall be controlled to the extent necessary to limit visible emissions to 5 percent opacity.

The owner or operator shall take reasonable precautions to control unconfined emissions from hoppers, storage and conveying equipment, conveyor drop points, truck loading and unloading, roads, parking areas, stock piles, and yards. The following shall constitute reasonable precautions:

a. Management of roads, parking areas, stock piles, and yards, which shall include one or more of the following:

   (1) Paving and maintenance of roads, parking areas, and yards.
   (2) Application of water or environmentally safe dust-suppressant chemicals when necessary to control emissions.
   (3) Removal of particulate matter from roads and other paved areas under control of the owner or operator to mitigate reentrainment, and from building or work areas to reduce airborne particulate matter.
   (4) Reduction of stock pile height or installation of wind breaks to mitigate wind entrainment of particulate matter from stock piles.

b. Use of spray bar, chute, or partial enclosure to mitigate emissions at the drop point to the truck.

Test Methods and Procedures

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

Initial VE testing shall be conducted within 30 days after commencing operation of the concrete batch plant.

Test procedures shall meet all applicable requirements of Rule 62-297.310, FAC.

Visible emissions tests of silo dust collector exhaust points shall be conducted while loading the silo at a rate that is representative of the normal silo loading rate. The minimum loading rate shall be 25 tons per hour unless such rate is unachievable in practice. If emissions from the weigh hopper (batcher) operation are also controlled

by the

silo dust collector, then the batching operation shall be in operation during the visible emissions test. The batching rate during the emissions test shall be representative of the normal batching rate and duration. Each test
report shall state the actual silo loading rate during emissions testing and, if applicable, whether or not batching occurred during emissions testing.

If emissions from the weigh hopper (batcher) operation are controlled by a dust collector which is separate from the silo dust collector, visible emissions tests of the weigh hopper (batcher) dust collector exhaust point shall be conducted while batching at a rate that is representative of the normal batching rate and duration. Each test report shall state the actual batching rate during emissions testing.

Each dust collector exhaust point shall be tested annually for compliance with the visible emission limiting standard.

Each dust collector exhaust point shall be tested for a minimum of 30 minutes or, if the operation is normally completed within less than 30 minutes and does not recur within that time, the test shall last for the length of the loading operation.

Record-keeping and Reporting

The permittee shall submit an Operation and Maintenance Plan with the Title V Revision Application.

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 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.