



**FLORIDA DEPARTMENT OF
ENVIRONMENTAL PROTECTION**

NORTHEAST DISTRICT
8800 BAYMEADOWS WAY WEST, SUITE 100
JACKSONVILLE, FLORIDA 32256

RICK SCOTT
GOVERNOR

CARLOS LOPEZ-CANTERA
LT. GOVERNOR

JONATHAN P. STEVERSON
SECRETARY

Sent by Electronic Mail – Received Receipt Requested

PERMITTEE

United States Navy
6801 Roosevelt Blvd.
Jacksonville, Florida 32212

Air Permit No. 0310215-051-AC
Permit Expires: 01/02/2017

Authorized Representative:
Capt. Roy C. Undersander, Commanding Officer

Naval Air Station, Jacksonville
Air Construction Permit
New Abrasive Blast Booth

This is the final air construction permit, which authorizes the construction of a new abrasive blast booth (EU128) and ventilation system control device in Building 101C. The proposed work will be conducted at the Naval Air Station, Jacksonville, which is a National Security facility (Standard Industrial Classification No. 9711). The facility is located in Duval County at 6801 Roosevelt Blvd. in Jacksonville, Florida. The UTM coordinates are Zone 17, 434.2 km East, and 3342.80 km North. As noted in the Final Determination provided with this final permit, only minor changes and clarifications were made to the draft permit.

This final permit is organized by the following sections.

- Section 1. General Information
- Section 2. Administrative Requirements
- Section 3. Emissions Unit Specific Conditions
- Section 4. Appendices

Because of the technical nature of the project, the permit contains numerous acronyms and abbreviations, which are defined in Appendix A of Section 4 of this permit.

This air pollution construction permit is issued under the provisions of: Chapter 403 of the Florida Statutes (F.S.) and Chapters 62-4, 62-204, 62-210, 62-212, 62-296 and 62-297 of the Florida Administrative Code (F.A.C.). The permittee is authorized to conduct the proposed work in accordance with the conditions of this permit. This project is subject to the general preconstruction review requirements in Rule 62-212.300, F.A.C. and is not subject to the preconstruction review requirements for major stationary sources in Rule 62-212.400, F.A.C. for the Prevention of Significant Deterioration (PSD) of Air Quality.

Upon issuance of this final permit, any party to this order has the right to seek judicial review of it under Section 120.68 of the Florida Statutes by filing a notice of appeal under Rule 9.110 of the Florida Rules of Appellate Procedure with the clerk of the Department of Environmental Protection in the Office of General Counsel (Mail Station #35, 3900 Commonwealth Boulevard, Tallahassee, Florida, 32399-3000) and by filing a copy of the notice of appeal accompanied by the applicable filing fees with the appropriate District Court of Appeal. The notice must be filed within 30 days after this order is filed with the clerk of the Department.

AIR CONSTRUCTION PERMIT

Executed in Jacksonville, Florida

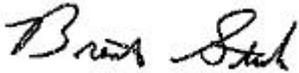


Richard S. Rachal III, P.G.
Program Administrator
Waste & Air Resource Management

FILING AND ACKNOWLEDGEMENT & CERTIFICATE OF SERVICE

Filed on this date pursuant to § 120.52, Florida Statutes, with the designated Department Clerk, receipt of which is hereby acknowledged. The undersigned hereby certifies that this Final Air Permit package (including the Final Determination and Final Permit) and all copies were sent before the close of business on January 2, 2015 to the listed persons.

David Ford, Air Program Manager, Naval Air Station, Jacksonville (dave.ford@navy.mil)
Melissa Vergenz, P.E., LG2 Environmental Solutions, Inc. (mvergenz@lg2es.com)
Leesa Gerald, President, LG2 Environmental Solutions, Inc. (leesagerald@lg2es.com)



Clerk

01/02/2015
Date

SECTION 1. GENERAL INFORMATION

FACILITY AND PROJECT DESCRIPTION

Existing Facility

The Naval Air Station (NAS), Jacksonville Complex, is located in Duval County, in the northeastern sector of Florida. This naval base occupies about 3400 acres along the west bank of the St. Johns River. The base is approximately 30 miles inland from the Atlantic Ocean and 13 miles south of downtown Jacksonville. The main gate to the base can be accessed at about 3 miles north of the intersection of U.S. Highway 17 (US 17) and Interstate 295 (I-295) on US 17 (also known as Roosevelt Boulevard). Although the NAS complex consists of over 115 individual commands, for the purpose of this permit air pollutant emissions may be categorized as belonging to one of three major organizations as follows:

1. NAS provides training of aircraft crews and commands, supports fleet and shore based personnel, maintains and operates facilities, and provides services and materials to support operation of the aviation activities. Air pollutant emitting activities associated with NAS primarily result from operation and maintenance of military aircraft.
2. The Public Works Department (PWD) maintains support facilities, such as the boiler plants and other utilities. PWD contracts facility maintenance operations with an outside contractor. Air pollution activities are primarily from combustion of fuels in boilers.
3. The Fleet Readiness Center Southeast (FRCSE) is a merger of the former Naval Air Depot, an organization that has been in operation since 1940 performing in-depth (Level 3) maintenance, repair and rework of naval aircraft, and the former Aircraft Intermediate Maintenance Division, which performed intermediate (Level 2) maintenance and repair of naval aircraft and ground support equipment, into one organization. With over 4,000 employees it occupies more than 50 buildings in over 102 acres at the east end of NAS and along the primary runway. FRCSE personnel perform in-depth and intermediate level maintenance, repair, and rework of military aircraft, engines, components, accessories, and ground support equipment. Most of the air pollutant emitting activities at the NAS Jacksonville complex are located within FRCSE, and consist of activities such as aircraft surface coating and repainting operations, solvent use operations, a chrome electroplating facility, abrasive blasting operations, engine testing, intermediate maintenance of military aircraft, corrosion control, and aircraft engine repair.

Intermediate level maintenance performed by FRCSE consists of several divisions that perform various maintenance activities:

- a. The 400 Division performs maintenance on aircraft engines.
- b. The 500 Division is responsible for airframes maintenance.
- c. The 600 Division performs maintenance on aircraft electronic equipment.
- d. The 700 Division performs maintenance on aircraft weapons and ordnance systems.
- e. The 800 Division maintains life support equipment on the aircraft.
- f. The 900 Division performs maintenance on aircraft ground support equipment.

SECTION 1. GENERAL INFORMATION

Proposed Project

This project is for the construction of a new abrasive blast booth (EU128) and ventilation system control device in Building 101C. This project will add the following **emissions unit**:

Facility ID No. 0310215	
ID No.	Emission Unit Description
128	Abrasive Blasting Booth in Bldg. 101C

EU128 is a new abrasive blast booth and ventilation system control device located in the Fleet Readiness Center Southeast (FRSCE) Composite Shop building 101C. This unit will be used to provide metal surface preparation in accordance with Naval Air Systems Command Adhesive Bonding Local Process Specification, LPS/JX 751B. The unit will be designed for surface preparation of aluminum and titanium aircraft components using 50 micron white aluminum oxide media, 240-280 grit (MIL-A-21380B, Type-1); and for use with Size 13 glass bead (MIL-G-9954) and all sizes plastic media (MIL-P-85891).

The applicant is requesting a slight increase of the permitted allowable emissions of particulate matter (PM), PM₁₀, and PM_{2.5}. A small amount of blasting located in this building was accomplished in a glove box blast booth that exhausted indoors. This blast booth will be replaced by EU128, which is a larger blast room with upgraded technologies in industrial ventilation, to improve personnel working conditions and creature comfort.

EU128 will be subject to Rule 62-296.700 – Reasonably Available Control Technology (RACT) for Particulate Matter; and to 40 CFR 63, Subpart GG – National Emission Standards for Aerospace Manufacturing and Rework Facilities.

Pursuant to Rule 62-212.400, F.A.C., the United States Navy, Naval Air Station, Jacksonville, provided information to show that the project will not exceed the significant emissions rates that require preconstruction review for the Prevention of Significant Deterioration (PSD) of Air Quality.

FACILITY REGULATORY CLASSIFICATION

- The facility **is** a major source of hazardous air pollutants (HAP).
- The facility **has no** units subject to the acid rain provisions of the Clean Air Act (CAA).
- The facility **is** a Title V major source of air pollution in accordance with Chapter 213, F.A.C. and Rule 2.501, JEPB.
- The facility **is** a major stationary source in accordance with Rule 62-212.400(PSD), F.A.C. and Rule 2.401, JEPB

SECTION 2. ADMINISTRATIVE REQUIREMENTS

1. Permitting Authority & Compliance Authority: The permitting authority for this project is the Florida Department of Environmental Protection (Department), Northeast District Office, Waste and Air Resource Management, 8800 Baymeadows Way West, Suite 100, Jacksonville, FL 32256. All documents related to applications for permits to operate an emissions unit shall be submitted to the Northeast District Office, Waste and Air Resource Management Program.

The compliance authority for this project is the Florida Department of Environmental Protection (Department), Northeast District Office, Compliance Assurance, 8800 Baymeadows Way West, Suite 100, Jacksonville, FL 32256. All documents related to compliance for an emissions unit shall be submitted to the Northeast District Office, Compliance Assurance.

The Permitting Authority and Compliance Authority phone number is 904-256-1700.

2. Appendices: The following Appendices are attached as part of this permit:
 - a. Appendix A. Citation Formats and Glossary of Common Terms;
 - b. Appendix B. General Conditions;
 - c. Appendix C. Common Conditions; and
 - d. Appendix D. Common Testing Requirements.
 - e. Appendix E. NESHAP, Subpart A General Provisions
 - f. Appendix NESHAP, Subpart GG
3. Applicable Regulations, Forms and Application Procedures: Unless otherwise specified in this permit, the construction and operation of the subject emissions units shall be in accordance with the capacities and specifications stated in the application. The facility is subject to all applicable provisions of: Chapter 403, F.S.; and Chapters 62-4, 62-204, 62-210, 62-212, 62-213, 62-296 and 62-297, F.A.C. Issuance of this permit does not relieve the permittee from compliance with any applicable federal, state, or local permitting or regulations.
4. New or Additional Conditions: For good cause shown and after notice and an administrative hearing, if requested, the Department may require the permittee to conform to new or additional conditions. The Department shall allow the permittee a reasonable time to conform to the new or additional conditions, and on application of the permittee, the Department may grant additional time. [Rule 62-4.080, F.A.C.; Rule 2.201, JEPB]
5. Modifications: The permittee shall notify the Compliance Authority upon commencement of construction. No new emissions unit shall be constructed and no existing emissions unit shall be modified without obtaining an air construction permit from the Department. Such permit shall be obtained prior to beginning construction or modification. [Rules 62-210.300(1) and 62-212.300(1)(a), F.A.C.; Rule 2.301, JEPB, and Rule 2.401, JEPB]
6. Source Obligation:
 - (a) At such time that a particular source or modification becomes a major stationary source or major modification (as these terms were defined at the time the source obtained the enforceable limitation) solely by virtue of a relaxation in any enforceable limitation which was established after August 7, 1980, on the capacity of the source or modification otherwise to emit a pollutant, such as a restriction on hours of operation, then the requirements of subsections 62-212.400(4) through (12), F.A.C., shall apply to the source or modification as though construction had not yet commenced on the source or modification.

SECTION 2. ADMINISTRATIVE REQUIREMENTS

- (b) At such time that a particular source or modification becomes a major stationary source or major modification (as these terms were defined at the time the source obtained the enforceable limitation) solely by exceeding its projected actual emissions, then the requirements of subsections 62-212.400(4) through (12), F.A.C., shall apply to the source or modification as though construction had not yet commenced on the source or modification.

[Rule 62-212.400(12), F.A.C., and Rule 2.401, JEPB]

7. Application for Title V Permit: This permit authorizes construction of the permitted emissions units and initial operation to determine compliance with Department rules. A Title V air operation permit is required for regular operation of the permitted emissions unit. The permittee shall apply for a Title V air operation permit at least 90 days prior to expiration of this permit, but no later than 180 days after commencing operation. To apply for a Title V operation permit, the applicant shall submit the appropriate application form, compliance test results, and such additional information as the Department may by law require. The application shall be submitted to the appropriate Permitting Authority with copies to the Compliance Authority. [Rules 62-4.030, 62-4.050, and Chapter 62-213, F.A.C.]

SECTION 3. EMISSIONS UNIT SPECIFIC CONDITIONS

This section of the permit addresses the following emissions unit.

EU No.	Brief Description
128	Abrasive Blasting Booth in Bldg. 101C

Emission Unit Description: Abrasive blasting booth using aluminum oxide, glass, corn starch (CHP), plastic, or similar materials as blast media. Blasting will be used to provide metal surface preparation of aluminum and titanium aircraft components. Other aircraft components may also be cleaned using abrasive blast media in these booths.

Emission Control Device: The blast booth will be vented to a Donaldson-Torit cartridge dust collector and HEPA filters. The discharge stack height is 26 ft. with an exit diameter of 2.16 ft. and an exit temperature of 77 degrees Fahrenheit.

{This EU is regulated under 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]}

Essential Potential to Emit (PTE) Parameters

1. **Hours of Operation.** The hours of operation for this EU shall not exceed 4,160 hrs/yr.
[Application No. 0310215-051-AC; Rule 62-210.200(PTE), FAC, and Rule 2.301, JEPB]
2. The estimated maximum airflow rate for this emission unit is 11,500 dscfm.
[Rule 62-296.700(4)(a), FAC, and Rule 2.1101, JEPB]

Emission Limitations and Standards

3. **Maximum Charging Rate.** The maximum throughput to the blasting system is 3,120 tons/yr of abrasive blasting media.
[Rule 62-210.200(PTE), FAC, and Rule 2.301, JEPB]
4. 40 CFR 63, Subpart GG, National Emission Standards for Aerospace Manufacturing and Rework Facilities, and 40 CFR 63, Subpart A, General Provisions, as delineated in Table 1 to Subpart GG, shall apply to this emission unit.
5. **PM Emissions.** PM emissions from the emission discharge point shall not exceed 0.03 gr/dscf, equivalent emissions are 2.96 lbs/hr and 6.15 tons/yr. However, this limit may be exceeded if the control device has an actual particulate matter collection efficiency of at least 98%.
[Rule 62-296.712(2), FAC, and Rule 2.1101, JEPB]
6. **Visible Emissions.** The opacity standard for this emissions unit shall be the average opacity level achieved during the initial compliance test which establishes compliance with the standard in **Specific Condition 5**, plus 5 percent opacity.
[Rule 62-296.712(2), FAC, and Rule 2.1101, JEPB]

SECTION 3. EMISSIONS UNIT SPECIFIC CONDITIONS

7. The owner or operator shall not circumvent the provisions of an applicable emission limitation by increasing the volume of gas in any exhaust or group of exhausts for the purpose of reducing the stack gas concentration. This includes allowing dilution air to enter the system through leaks, open vents, or similar means.
[Rule 62-296.700(5), FAC, and Rule 2.1101, JEPB]
8. The owner/operator shall operate the blasting booth, air handling and collection system, the baghouse, and the HEPA filter in accordance with manufacturer's specifications. During periods of malfunction of such equipment the owner/operator may use substitute materials during the repair period provided the substitute materials used are those available that minimize organic HAP emissions. In no event shall substitute materials be used for more than 15 days annually, unless such materials are organic HAP free.
[40 CFR 63.746(b)(2), Rule 62-204.800, FAC, and Rule 2.201, JEPB]
9. The owner/operator shall only perform the depainting (blasting) operation in the enclosed blasting booth. The airstream from the blast booth shall be passed through a baghouse and HEPA filter prior to discharge to the atmosphere.
[40 CFR 63.746(b)(4)(ii)(B), Rule 62-204.800, FAC, and Rule 2.201, JEPB]
10. The owner/operator shall conduct the handling and transfer, of all wastes produced from this operation, which may contain HAP materials, to and from containers, tanks, vats, vessels, and piping systems in such a manner that minimizes spills.
[40 CFR 63.748, Rule 62-204.800, FAC, and Rule 2.201, JEPB]

Test Methods and Procedures

11. 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. The minimum testing time shall be 30 minutes.
[Rule 62-296.712, FAC, Rule 62-297.310(4)(a)2., FAC, and Rule 2.1101, JEPB]
12. Initial VE testing shall be conducted within 60 days after achieving the maximum production rate at which the EU will operate but no later than 180 days after initial startup of the EU. Initial VE compliance testing shall be conducted for a minimum period of 30 minutes.
[Rule 62-297.310(7)(b), FAC, Rule 62-297.310(4)(a), FAC and Rule 2.1101, JEPB]
13. Testing for demonstration of compliance shall be performed in accordance with EPA RM 5 (as described in 40 CFR 60, Appendix A) for the determination of the PM emission rate. The minimum sample volume shall be 30 dscf.
[Rule 62-297.310(7)(b), FAC, Rule 62-204.800, FAC, Rule 62-296.712(3)(b), FAC, and Rule 2.1201, JEPB]
14. Initial PM testing shall be conducted within 60 days after achieving the maximum production rate at which the EU will operate but no later than 180 days after initial startup of the EU.
[Rule 62-297.310(7)(b), FAC and Rule 2.1101, JEPB]

SECTION 3. EMISSIONS UNIT SPECIFIC CONDITIONS

Record-keeping and Reporting Requirements

15. The permittee shall submit an Operation and Maintenance Plan with the Title V Revision Application. The operation and maintenance plan shall include performance parameters which indicate the rate of operation, process weight through-put, the fuel or other energy source, the materials being processed or other physical or chemical characteristics, as applicable. Such parameters may include, but shall not be limited to the following:

- (a) Weight per unit time of raw materials input;
- (b) Process temperature or pressure;
- (c) Fuel or fuel mixture;
- (d) Chemical or physical data on product or raw materials;
- (e) Air to fuel ratio or percent excess oxygen;
- (f) Electrical power use rate by auxiliary equipment.

The plan shall contain inspection and maintenance schedules including periodic assessments of the condition of manholes, ducting, breaching, hoods, conveyor and elevator housing, loading sheds and other equipment, and a schedule for recording of performance parameter data.

[Rule 62-296.700(6)(c), FAC and Rule 2.1101, JEPB]

16. The permittee shall notify the Compliance Authority of the actual startup date of the emission unit within 15 calendar days after that date. The notification received date shall be determined through the postmark date or the delivery date, whichever occurs first.

[40 CFR 63.9(b)(5)(ii), Rule 62-204.800, FAC, and Rule 2.201, JEPB]

17. The owner/operator shall maintain records of each type of aircraft depainted, a listing of the parts, subassemblies, and assemblies normally removed from the aircraft before depainting. Prototype, test models, or aircraft which exist in low numbers (i.e., less than 25 aircraft of any one type) are exempt from this requirement.

[40 CFR 63.752(e)(4), Rule 62-204.800, FAC, and Rule 2.201, JEPB]

18. The owner/operator shall maintain records of the names and types of dry media blasting equipment used.

[40 CFR 63.752(e)(5)(i), Rule 62-204.800, FAC, and Rule 2.201, JEPB]

19. The owner/operator shall maintain the following records during periods of malfunction of the dry media blasting system:

- (a) Equipment or technique which malfunctioned
- (b) Date that the malfunction occurred
- (c) Description of the malfunction
- (d) Methods used to depaint aerospace vehicles during the malfunction
- (e) Dates that the alternative methods were begun and discontinued
- (f) Date that the malfunction was corrected

[40 CFR 63.752(e)(5)(ii), Rule 62-204.800, FAC, and Rule 2.201, JEPB]

SECTION 3. EMISSIONS UNIT SPECIFIC CONDITIONS

20. The owner/operator shall submit semi-annual reports (every 6 months) for the period(s) September 1 through February 28 or 29, and March 1 through August 31. The reports shall be due May 1 for the September through February reporting period and November 1 for the March through August reporting period. The reports shall contain the following information:
- (a) Identification of any 24 hour period where organic HAP were emitted from the depainting of aerospace vehicles, other than from exempt operations listed in 40 CFR 63.746(a), (b)(3), and (b)(5).
 - (b) Any new non-chemical depainting technique in use since the notification of compliance status or any subsequent semiannual report was filed
 - (c) Periods of Malfunction:
 - (A) Equipment or technique which malfunctioned
 - (B) Date that the malfunction occurred
 - (C) Description of the malfunction
 - (D) Methods used to depaint aerospace vehicles during the malfunction
 - (E) Dates that the alternative methods were begun and discontinued
 - (F) Date that the malfunction was corrected
 - (G) All periods when the depainting operation was not shut down during a malfunction and/or when the depainting operation was not shutdown when measured operational parameters were below or above limits specified by the equipment manufacturer or locally prepared operational procedures
 - (d) A list of new and discontinued aircraft models depainted at the facility over the last 6 months and a list of the parts normally removed for depainting for each new aircraft model being depainted
 - (e) If the depainting operation has been in compliance for the reporting period a statement signed by the responsible official stating that the operation was in compliance with the applicable standards

[40 CFR 63.753(d)(1), Rule 62-204.800, FAC, and Rule 2.201, JEPB]

21. The owner/operator shall submit annual reports (every 12 months) for the period September 1 through August 31. The reports shall be due November 1 each year. The reports shall contain the following information:
- (a) The average volume per aircraft of organic HAP containing chemical strippers or weight of organic HAP used for spot stripping and decal removal operations if it exceeds the limits specified in 40 CFR 63.746(b)(3)
 - (b) The number of times the measured operational parameters were below or above limits specified by the equipment manufacturer or locally prepared operational procedures

[40 CFR 63.753(d)(2), Rule 62-204.800, FAC, and Rule 2.201, JEPB]

22. The owner/operator shall maintain records of the monthly operating hours of the blasting booth and shall maintain records of the monthly use of abrasive blasting material. These records shall be kept and maintained for a minimum period of five (5) years. Records shall be made available to the Permitting Authority upon request. Semi-annual reports of this information shall be submitted to the Permitting Authority with the semi-annual reports required above.

[Rule 62-213.440(1)(b), FAC, and Rule 2.501, JEPB]

General Provisions Applicability to Subpart GG

23. Table 1 to Subpart GG of Part 63 defines the applicable parts of the General Provisions which apply to affected emission units in 40 CFR, Subpart GG.

[40 CFR 63, Subpart GG, Table 1, Rule 62-204.800, FAC, and Rule 2.201, JEPB]