Florida Department of Environmental Protection

Northeast District
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PERMITTEE

Department of the Navy
U.S. Naval Station, Mayport
P.O. Box 280112
Jacksonville, FL 32228-0112

Authorized Representative:

Captain W.R. McCall

Air Permit No. 0310213-026-AC
Expiration Date: January 13, 2017

U.S. Naval Station, Mayport
New abrasive blast room and dust collection system

PROJECT

The construction permit authorizes the construction of one (1) new abrasive blast room and dust collection system to be located in Building 2195 (Emissions Unit 041). The blast room will be operated by NASSCO/General Dynamics and used for surface preparation of ship components using steel shot and garnet media. The proposed work will be conducted at the U.S. Naval Station, Mayport, which is a National Security facility (Standard Industrial Classification No. 9711). The facility is located in Duval County at Old Mayport Road in Jacksonville, Florida. The UTM coordinates are Zone 17, 460.420 km East and 3361.610 km North.

This final permit is organized into the following sections: Section 1 (General Information); Section 2 (Administrative Requirements); Section 3 (Facility Wide Conditions); Section 4 (Emissions Unit Specific Conditions); and Section 5 (Appendices). Because of the technical nature of the project, the permit contains numerous acronyms and abbreviations, which are defined in Appendix A of Section 5 of this permit. As noted in the Final Determination provided with this final permit, only minor changes and clarifications were made to the draft permit

STATEMENT OF BASIS

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.

Executed in Jacksonville, Florida

Richard S. Rachal III, P.G.
Permitting Program Administrator

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 the Final Air Permit package (including the Final Determination and Final Permit), and all copies were sent before the close of business on January 13, 2016, to the listed persons.

Captain W.R. McCall, United States Navy (wesley.mccall@navy.mil)
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January 13, 2016
Clerk Date

FACILITY DESCRIPTION

Existing Facility

The Department of the Navy operates the U.S. Naval Station, Mayport as the homeport for surface combat ships and various support ships. Air pollution sources located at the base include both gas fired as well as fuel oil fired boilers and water heaters, emergency generators, miscellaneous fuel storage tanks, cold solvent degreasers, engine test stands, abrasive blasting operations, various surface coating operations (paint booths, open air painting, and ship painting) associated with infrastructure as well as with aircraft and ship maintenance.

The primary mission of the U.S. Naval Station, Mayport is to "sustain and enhance war fighter efforts" by providing the training of various Navy personnel. Of the several entities at the naval station, U.S. Naval Station, Mayport and the Naval Engineering Command Southeast (NAVFAC SE) are responsible for most of the permanent operations. NAVFAC SE is responsible for the operation and maintenance of their various boilers, emergency generators and associated fuel tanks; U.S. Naval Station, Mayport is responsible for the other equipment operations, including the activities of the Southeast Regional Maintenance Center (SERMC) and the various on-site contractors.

The existing facility consists of the following emissions units.

Facility ID No. 0310213

ID No.	Emission Unit Description
001	Boiler No. 1, Bldg. 1241
002	Boiler No. 2, Bldg. 1241
003	Boiler No. 3, Bldg. 1241
015	SERMC Blast Booth, Bldg. 1488
022	Miscellaneous Surface Coating Operations
030	FRCSE Blast Booth No. 2, Bldg. 2085
031	Abrasive Blast Booth, Bldg. 1936
033	SERMC Abrasive Blast Booth No. 3, Bldg. 1488, Shop 71 A
034	Controlled Pyrolysis Cleaning Furnace (Burnout Oven), Bldg. 1488
035	16.33 MMBtu per hour Steam Boiler, Bldg. 1241
036	SERMC Abrasive Blast Booth No. 4, Bldg. 1488
037	Emergency Diesel Engine Generators (constructed prior to June 12, 2006)
038	Emergency Diesel Engine Generators (constructed after June 12, 2006)
039	Gasoline Dispensing Facilities > 100,000 Gallons per Month
040	Gasoline Dispensing Facilities < 10,000 Gallons per Month

PROPOSED PROJECT

This air construction permit authorizes construction of one (1) new abrasive blast room and dust collection system to be located in Building 2195. The blast room will be operated by NASSCO/General Dynamics and used for surface preparation of ship components using steel shot and garnet media.

The new dust collector system shall consist of a Farr Gold Cone Series cartridge dust collector, Model GS12L (or equivalent). The dust collector will have 12 cartridges with 3,900 square feet of filter area, an estimated maximum airflow rate of 11,500 dscfm, an air-to filter media ratio of 2.95:1, and a minimum design control efficiency of 99.99%.

The new abrasive blast room will be subject to Rule 62-296.700 – Reasonably Available Control Technology (RACT) for Particulate Matter.

This project will add the following emissions unit.

Facility ID No. 0310213	
ID No.	**Emission Unit Description**
-041	Abrasive Blasting Room with associated dust collection system, Bldg. 2195

FACILITY REGULATORY CLASSIFICATION

- The facility **is not** a major source of hazardous air pollutants (HAP).
- The facility **does not** operate units subject to the acid rain provisions of the Clean Air Act.
- 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 not** a major stationary source in accordance with Rule 62-212.400, F.A.C. for the Prevention of Significant Deterioration (PSD) of Air Quality and Rule 2.401, JEPB
- This facility **does have** one or more emissions units subject to NSPS (40CFR 60).
- This facility **does have** one or more emissions units subject to NESHAP (40 CFR 61 or Part 63)

SECTION 2. ADMINISTRATIVE REQUIREMENTS

1. Permitting Authority: The permitting authority for this project is the Northeast District Office, Permitting Program, of the Florida Department of Environmental Protection (Department). The Northeast District Office's mailing address is 8800 Baymeadows Way West, Suite 100, Jacksonville, Florida 32256. All documents related to applications for permits to operate an emissions unit shall be submitted to the Northeast District Office, Permitting Program. The Permitting Authority's telephone number is (904) 256-1700.

2. Compliance Authority: All documents related to compliance activities such as reports, tests, and notifications shall be submitted to the Northeast District Office, Compliance Assurance at: 8800 Baymeadows Way West, Suite 100, Jacksonville, Florida 32256. The Compliance Authority's telephone number is (904) 256-1700.

3. Appendices: The following Appendices are attached as part of this permit: Appendix A (Citation Formats and Glossary of Common Terms); Appendix B (General Conditions); Appendix C (Common Conditions); Appendix D (Common Testing Requirements); and Appendix LR (Local Rule Index).

4. 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.

   [Rule 62-210.300, F.A.C., and Rule 2.301, JEPB]

5. 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.; 2.1401, JEPB]

6. 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]

7. Construction and Expiration. The expiration date shown on the first page of this permit provides time to complete the physical construction activities authorized by this permit, complete any necessary compliance testing, and obtain an operation permit. Notwithstanding this expiration date, all specific emissions limitations and operating requirements established by this permit shall remain in effect until the facility or emissions unit is permanently shut down. For good cause, the permittee may request that that a permit be extended. Pursuant to Rule 62-4.080(3), F.A.C., such a request shall be submitted to the Permitting Authority in writing before the permit expires.

   [Rules 62-4.070(4), 62-4.080 & 62-210.300(1), F.A.C, Rules 2.1401 and 2.301, JEPB]

8. 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.

   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)(b),(c), F.A.C.; Rule 2.401, JEPB]

9. 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., Rule 2.1401 and 2.501, JEPB]

1. Unconfined Emissions of Particulate Matter: No person shall cause, let, permit, suffer or allow the emissions of unconfined particulate matter from any activity, including vehicular movement; transportation of materials; construction; alteration; demolition or wrecking; or industrially related activities such as loading, unloading, storing or handling; without taking reasonable precautions to prevent such emissions. Reasonable precautions to prevent emissions of unconfined particulate matter at this facility include:
   (a) Paving and maintenance of roads, parking areas and yards.
   (b) Application of water or chemicals to control emissions from such activities as demolition of buildings, grading roads, construction, and land clearing.
   (c) Application of asphalt, water, oil, chemicals or other dust suppressants to unpaved roads, yards, open stock piles and similar activities.
   (d) Removal of particulate matter from roads and other paved areas under the control of the owner or operator of the facility to prevent re-entrainment, and from buildings or work areas to prevent particulate from becoming airborne.
   (e) Landscaping or planting of vegetation.
   (f) Use of hoods, fans, filters, and similar equipment to contain, capture and/or vent particulate matter.
   (g) Confining abrasive blasting where possible.
   (h) Enclosure or covering of conveyor systems.

   In determining what constitutes reasonable precautions for a particular facility, the Department shall consider the cost of the control technique or work practice, the environmental impacts of the technique or practice and the degree of reduction of emissions expected from a particular technique or practice.

   [Rule 62-296.320(4)(c), F.A.C.; Rule 2.1101, JEPB; Application No. 0310213-026-AC]

2. Objectionable Odors Prohibited: No person shall cause, suffer, allow or permit the discharge of air pollutants which cause or contribute to an objectionable odor.

   {Note: An objectionable odor is defined in Rule 62-210.200(Definitions), F.A.C., as any odor present in the outdoor atmosphere which by itself or in combination with other odors, is or may be harmful or injurious to human health or welfare, which unreasonably interferes with the comfortable use and enjoyment of life or property, or which creates a nuisance.}

   [Rule 62-296.320(2), F.A.C.; Rule 2.1101, JEPB]

4. The facility shall be subject to the City of Jacksonville Ordinance Code, Title X, Chapter 360 [Environmental Regulation], Chapter 362 [Air and Water Pollution], Chapter 376 [Odor Control], and JEPB Rule 1 [Final Rules with Respect to Organization, Procedure, and Practice].

5. The facility shall be subject to JEPB Rule 2, Parts I through V, and Parts IX through XIII.

Subsection B: Abrasive Blasting Booth No. 2

This section of the permit addresses the following emissions unit.

Emissions Unit Number	Brief Description
041	**Abrasive Blasting Room with associated dust collection system, Bldg. 2195** *Description:* Circle R Industries, Inc. Abrasive Blasting room for the metal surface preparation of ship components. The blast room facility will be designed for the removal of welding slag and surface rust using steel grit abrasive G40/50 mix and garnet blast media. The Abrasive Blasting Room will be located in Building 2195. *Capacity:* The abrasive blasting operation is rated at a maximum process rate of no more than 5,880 pounds per hour of abrasive blast media. *Controls:* The abrasive blasting operation shall be equipped with a dust collector system consisting of a Farr Gold Cone Series dust collector, Model GS12L (or equivalent). The dust collector will have 12 cartridges with 3,900 square feet of filter area, an air-to filter media ratio of 2.95:1, and a minimum design control efficiency of at least 99.99%. *Stack Parameters:* The stack will be of horizontal design and at a height of approximately 10 feet above ground. The exit temperature shall be approximately 80º F with an estimated design flow rate of 11,500 dry standard cubic feet per minute (dscfm). [Rule 62-296.700(4)(a)4. and 5., F.A.C., and Rule 2.1101, JEPB]

{Permitting note(s): This emissions unit is subject to Rule 62-296.712, F.A.C.- Miscellaneous Manufacturing Process Operations.

EQUIPMENT

A.1. **<u>Abrasive Blasting Room:</u>** The permittee is authorized to install a new abrasive blasting room. The blast room shall be approximately 16 feet wide by 30 feet in length and 14 feet in height and generally consist of a metered cross trough designed floor reclaim system, including elevator, separator, abrasive hopper, and blast pots.

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A.2. **<u>Air Pollution Control Equipment</u>**: The permittee shall install a dust collector system and ventilation system on the Abrasive Blasting Room for the control of particulate matter emissions.

The new dust collector system shall consist of a dust collector equipped with Farr Gold (or equivalent) cartridge filters. The dust collector shall have a minimum design control efficiency of at least 99.99% and achieve at least the emission standards specified in this permit for this Emissions Unit.

The dust collector system shall be brought on line in accordance with the manufacturer's procedures and guidelines and shall be utilized and functioning properly whenever the abrasive blasting room is in operation.

[Application No. 0310213-026-AC; Rule 62-4.070, F.A.C.- Reasonable Assurance; Rule 62-296.700(4)(a)3., F.A.C., Rule 62-296.700(4)(a)6., F.A.C., and Rule 2.1401, JEPB, Rule 2.1101, JEPB]

PERFORMANCE RESTRICTIONS

A.3. **Hours of Operation:** The hours of operation are not restricted, i.e. 8,760 hours per year.

[Application No. 0310213-026-AC; Rules 62-4.070(3), 62-210.200(PTE), 62-296.700(4), 62-296.700(4)(a)7., F.A.C.; Rule 2.1401, JEPB, Rule 2.301, JEPB, Rule 2.1101, JEPB]

A.4. **Method of Operation - Volumetric Flow Rate:** The estimated maximum volumetric flow rate for the dust collector is 11,500 dscfm.

[Rule 62-296.700(4)(a)2., F.A.C., and Rule 2.1101, JEPB; Application No. 0310213-026-AC]

A.5. **Method of Operation - Maximum Charging Rate:** The maximum throughput to the abrasive blasting operation shall be 5,880 pounds per hour of abrasive blasting media.

[Rule 62-210.200(PTE), F.A.C., and Rule 2.301, JEPB; Rule 62-296.700(4)(a)1., F.A.C., and Rule 2.1101, JEPB; Application No. 0310213-026-AC]

A.6. **Method of Operation – Abrasive Blasting Media:** The abrasive blasting media shall consist of steel grit abrasive G40/50 mix and garnet blast media.

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A.7. **Circumvention:** The permittee shall not circumvent the air pollution control equipment or allow the emission of air pollutants without this equipment operating properly.

[Rule 62-210.650, F.A.C.; Rule 2.301, JEPB]

A.8. **Circumvention:** 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), F.A.C., and Rule 2.1101, JEPB]

EMISSIONS STANDARDS

*{Permitting Note: Unless otherwise specified, the averaging times for **Specific Conditions A.10. - A.11.,** are based on the specified averaging time of the applicable test method.}*

A.9. **Reasonably Available Control Technology Applicability:** Reasonably Available Control Technology (RACT) Particulate Matter and Miscellaneous Manufacturing Process Operations shall apply to this emissions unit.

[Rule 62-296.700(1)(a), F.A.C., Rule 62-296.700(3), F.A.C., Rule 62-296.712, F.A.C., Rule 2.1101, JEPB]

A.10. **PM Emissions:** PM emissions from the emission discharge point shall not exceed 0.03 gr/dscf, equivalent emissions are 2.96 lbs/hr and 12.95 tons/yr.

[Rule 62-296.700(4)(b)1., F.A.C., Rule 62-296.712(2), F.A.C., and Rule 2.1101, JEPB]

A.11. **Visible Emissions:** Visible emissions from this Emissions Unit shall not exceed 5% opacity.

[Rule 62-296.712(2), F.A.C., and Rule 2.1101, JEPB]

TESTING REQUIREMENTS

A.12. Visible Emissions: Testing for demonstration of compliance with the visible emissions standard stated in **Specific Condition A.11.** shall be performed in accordance with EPA Reference Method 9, as described in 40 CFR 60, Appendix A-4. The initial test shall be performed within 60 days after reaching the maximum rate at which the Emissions Unit will be operated, but no later than 180 days after initial start-up of the Emissions Unit. The VE compliance testing shall be conducted for a minimum period of 30 minutes.

[Rule 62-296.712(3)(a), F.A.C., Rule 62-297.310(8)(b)1., F.A.C., Rule 62-297.310(5)(b), F.A.C. and Rule 2.1101, JEPB, Rule 2.1201, JEPB]

A.13. Particulate Matter Emissions: Testing for demonstration of compliance with the particulate matter emissions standard stated in **Specific Condition A.10.** shall be performed in accordance with EPA Reference Method 5, as described in 40 CFR 60, Appendix A-3. The initial test shall be performed within 60 days after reaching the maximum rate at which the Emissions Unit will be operated, but no later than 180 days after initial start-up of the Emissions Unit. The minimum sample volume shall be 30 dscf.

[Rule 62-296.712(3)(b), F.A.C., F.A.C., Rule 62-297.310(8)(b)1., F.A.C., and Rule 2.1101, JEPB, Rule 2.1201, JEPB]

NOTIFICATION REQUIREMENTS

A.14. Dust Collector System Commencement of Construction/Operation: The Permittee shall submit to the Compliance Authority written notification of the date of commencement of construction and also initial operation of the new abrasive blasting room and dust collector system. These notifications shall be submitted or postmarked within as many days prior to the date of construction/operation commencement as practical, but no later than one (1) business day following such date. Submissions may be sent electronically to the Compliance Authority: Christopher.Kirts@dep.state.fl.us.

[Rule 62-4.070(3), F.A.C.; Rule 2.1401, JEPB]

A.15. Test Requirements: The Permittee shall notify the Compliance Authority in writing at least 15 days prior to any required tests. Tests shall be conducted in accordance with the applicable requirements specified in Appendix D (Common Testing Requirements) of this permit.

[Rule 62-297.310(9), F.A.C.; Rule 2.1201, JEPB]

RECORDKEEPING REQUIREMENTS

A.16. Dust Collector System Commencement of Construction/Operation Records: The Permittee shall maintain a record of the date of commencement of construction and initial operation of the new abrasive blasting room and dust collector system.

[Rule 62-4.070(3), F.A.C.; Rule 2.1401, JEPB]

A.17. Operation and Maintenance Plan: The Permittee shall submit an Operation and Maintenance Plan with the Title V Revision Application. The plan shall meet the requirements of Rule 62-296.700(6), F.A.C.

[Rule 62-296.700(6)., F.A.C. and Rule 2.1101, JEPB]

A.18. **Abrasive Blasting Room –Abrasive Blast Media Records:** The Permittee 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.

[Rule 62-213.440(1)(b), F.A.C., Rule 62-4.070(3), F.A.C.; Rule 2.501, JEPB and Rule 2.1401, JEPB]

REPORTING REQUIREMENTS

A.19. **Performance Test Reports:** The Permittee shall prepare and submit reports for all required tests in accordance with the requirements specified in Appendix D (Common Testing Requirements) of this permit.

[Rule 62-297.310(10), F.A.C.; Rule 2.1201, JEPB]