COMMONWEALTH of VIRGINIA

DEPARTMENT OF ENVIRONMENTAL QUALITY
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STATEMENT OF LEGAL AND FACTUAL BASIS

Colonna's Shipyard, Inc.
Norfolk, Virginia
Permit No. TRO-60108

Title V of the 1990 Clean Air Act Amendments required each state to develop a permit program to ensure that certain facilities have federal Air Pollution Operating Permits, called Title V Operating Permits. As required by 40 CFR Part 70 and 9 VAC 5 Chapter 80, Colonna's Shipyard, Inc. has applied for a Title V Operating Permit for its Norfolk, Virginia facility. The Department has reviewed the application and has prepared a draft Title V Operating Permit.

Engineer/Permit Contact: ______________________ Date: ______________________
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Regional Director: ______________________ Date: October 12, 2010
Francis L. Daniel

I. FACILITY INFORMATION

Permittee
Colonna's Shipyard, Inc.
400 East Indian River Road
Norfolk, Virginia 23523

Facility
Colonna's Shipyard, Inc.
400 East Indian River Road
Norfolk, Virginia 23523

County-Plant Identification Number: 51-710-00028

Source Description

NAICS Code: 336611 - Ship Building and Repairing (except in floating drydocks)
NAICS Code: 488390 - Ship Building and Repairing (repair services provided by floating drydocks)

Colonna's Shipyard, Inc. functions primarily as a ship repair facility but also performs other types of work, such as steel fabrication. The source consists of two floating drydocks, two marine railways, and a Marine Travel lift facility.

Ship Repair Activities: Vessels are hauled out of the water for structural and mechanical repair and/or the removal and application of marine coatings. Vessel surfaces are prepared for coating application by the use of power tools (grinders, needle guns, sanders), abrasive blasting, or hydroblasting. The marine coating operations consist of HVLP spray coating application, as well as brush and roller application. The marine coating activities are subject to the requirements of 40 CFR 63, Subpart II, National Emission Standards for Shipbuilding and Ship Repair (Surface Coating). Fugitive emissions from abrasive blasting and marine coating activities are controlled using Best Management Practices, which include downspraying of materials, utilization of tarps and curtains, and the termination of blasting and coating operations when winds exceed 25 mph or if control methods prove ineffective.

Other repair activities include welding (primarily electric arc welding) and machining operations, including the use of mechanical grinders, presses, and lathes.

Steel Fabrication Activities: Steel fabrication activities at the source are similar to the ship repair activities (including welding and coating application) except that products are manufactured for use in commercial applications, such as power plants, hydro-electric plants, manufacturing facilities, etc.

Parts Washing: Three solvent-based parts washers are used for cleaning small parts.

Internal Combustion Engines: Two diesel generators are used to provide emergency power to the drydocks during interruptions in service from the normal power supplier and during testing and operational maintenance. The facility also operates a diesel-powered emergency fire pump.

Miscellaneous Activities: The facility engages in the application of fiberglass coatings on a limited number of propeller shafts. The facility is also in the process of adding a wastewater treatment system to treat oily water and process water from drydock discharges. The system will include an oil-water separator and a Dissolved Air Flotation (DAF) system.

The facility is a Title V major source of VOC and HAP. This source is located in an attainment area for all pollutants, and is a PSD minor source. Colonna's Shipyard, Inc. was constructed before 1972. There are no New Source Review permits associated with this facility.

II. EMISSION UNIT AND CONTROL DEVICE IDENTIFICATION

The emissions units at this facility consist of the following:

Emission Unit ID	Stack ID	Emission Unit Description	Size/Rated Capacity*	Pollution Control Device (PCD) Description	PCD ID	Pollutant Controlled	Applicable Permit Date
6	6	Abrasive Blasting	N/A	N/A	N/A	N/A	N/A
7	7	Marine Coating Application	Not Applicable	N/A	N/A	N/A	N/A
8		Degreasers (3 units)	45 gallons each	N/A	N/A	N/A	N/A
9	9	Drydock #1 Detroit Diesel Emergency Generator (Manufactured 1987, Installed 2002)	500 kW (671 hp)	N/A	N/A	N/A	N/A
10	10	Drydock #2 Detroit Diesel Emergency Generator (Manufactured 1984, Installed 1988)	275 kW (369 hp)	N/A	N/A	N/A	N/A
11	11	Emergency Fire Pump With Caterpillar Diesel Engine (Manufactured <1982, Installed 1989)	325 kW (436 hp)	N/A	N/A	N/A	N/A

III. EMISSIONS INVENTORY

A copy of the 2009 annual emission update is attached. Emissions are summarized in the following table.

2009 Actual Emissions

	2009 Criteria Pollutant Emission in Tons/Year			
Emission Unit	VOC	PM	PM_{10}	$PM_{2.5}$
Total	30.266	179.388	42.401	4.240

IV. EMISSION UNIT APPLICABLE REQUIREMENTS - Abrasive Blasting

A. Limitations

The following Virginia Administrative Codes have specific emission requirements that have been determined to be applicable:

9 VAC 5-40-20	Compliance for Existing Sources
9 VAC 5-40-80	Existing Source Standard for Visible Emissions
9 VAC 5-40-90	Existing Source Standard for Fugitive Dust/Emissions

B. Monitoring and Recordkeeping

The permit includes a requirement that the wind speed and wind direction be monitored and recorded. This condition will ensure compliance with the fugitive emissions requirements and will also be utilized as an indicator of opacity if particulate matter from onsite activities is being transported to adjacent property.

C. Streamlined Requirements

There are no streamlined requirements for these emission units.

V. EMISSION UNIT APPLICABLE REQUIREMENTS - Marine Coating Application

A. Limitations

The following Code of Federal Regulations has specific requirements that have been determined to be applicable:

40 CFR 63, Subpart II	National Emission Standards for Shipbuilding and Ship Repair (Surface Coating)

The following Virginia Administrative Code has been determined to be applicable and is incorporated into the specific conditions in this section of the permit:

9 VAC 5-60-100	Designated Emission Standards (National Emission Standards for Hazardous Air Pollutants for Source Categories)

The following Virginia Administrative Codes have specific emission requirements that have been determined to be applicable:

9 VAC 5-40-20	Compliance for Existing Sources
9 VAC 5-40-80	Existing Source Standard for Visible Emissions
9 VAC 5-40-90	Existing Source Standard for Fugitive Dust/Emissions

B. Compliance Procedures

The permit includes specific compliance requirements from 40 CFR 63, Subpart II.

C. Monitoring, Recordkeeping, and Reporting

The permit includes a requirement that the wind speed and wind direction be monitored and recorded. This condition will ensure compliance with the fugitive emissions requirements and will also be utilized as an indicator of opacity if particulate matter from onsite activities is being transported to adjacent property.

The permittee is required to comply with the recordkeeping and reporting requirements outlined in 40 CFR 63.788 for each compliance option chosen.

D. Streamlined Requirements

There are no streamlined requirements for these emission units.

VI. EMISSION UNIT APPLICABLE REQUIREMENTS - Degreasers

A. Limitations

The following Virginia Administrative Codes have specific emission requirements that have been determined to be applicable:

9 VAC 5-40-3280	Existing Source Standard for Volatile Organic Compounds
9 VAC 5-40-3290	Existing Source Control Technology Guidelines

B. Monitoring

The permittee is required to perform an annual visual inspection to ensure compliance with the labeling, cover, and closed container requirements. This section has been restructured into one condition (instead of two), since compliance with the monitoring requirements is accomplished by a single annual inspection.

C. Recordkeeping

The permittee is required to keep records of annual inspection results, any corrective actions taken, and methods of waste solvent disposal.

D. Streamlined Requirements

There are no streamlined requirements for these emission units.

VII. EMISSION UNIT APPLICABLE REQUIREMENTS - Internal Combustion Engines

A. Limitations

The following Code of Federal Regulations has specific requirements that have been determined to be applicable:

40 CFR 63, Subpart ZZZZ	National Emission Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines

The following Virginia Administrative Code has been determined to be applicable and is incorporated into the specific conditions in this section of the permit:

9 VAC 5-60-100	Designated Emission Standards (National Emission Standards for Hazardous Air Pollutants for Source Categories)

The following Virginia Administrative Codes have specific emission requirements that have been determined to be applicable:

9 VAC 5-50-20	Compliance for New and Modified Sources
9 VAC 5-50-80	New and Modified Source Standard for Visible Emissions

B. Compliance Procedures

The permittee is required to comply with the applicable compliance requirements outlined in 40 CFR 63, Subpart ZZZZ for the Drydock #2 emergency generator and the emergency fire pump diesel engine. Specific requirements from Subpart ZZZZ have been included in the permit for clarity.

Note: The Drydock #1 emergency generator is an existing compression ignition emergency stationary RICE with a site rating of more than 500 brake horsepower located at a major source of HAP emissions, thus it does not have to meet the requirements of 40 CFR 63, Subpart ZZZZ and of 40 CFR 63, Subpart A. No initial notification is necessary.

The emergency generators and the emergency fire pump diesel engine were also evaluated for applicability to 40 CFR 60, Subpart IIII (Standards of Performance for Stationary Compression Ignition Internal Combustion Engines). The Drydock #1 emergency generator, the Drydock #2 emergency generator, and the emergency fire pump diesel engine were all installed prior to the applicability date for NSPS IIII, thus this subpart does not apply to any of the source's engines/generators.

C. Monitoring, Recordkeeping, and Reporting

The permit does not include monitoring and recordkeeping requirements for opacity from the Drydock #1 emergency generator. In accordance with the definition of "emergency generator", the Drydock #1 generator is used only to provide power to the drydock during interruptions in service from the normal power supplier and during testing and operational maintenance. Operation of the generator is limited to 500 hours per year. Due to the intermittent use of the unit, and because opacity is not expected to exceed the standard when fired on diesel fuel, no requirement for opacity monitoring has been included. However, the permit does include recordkeeping requirements for fuel type and hours of operation to ensure compliance with the operating limitations.

The Drydock #2 emergency generator and the emergency fire pump engine are each below the insignificance threshold in 9 VAC 5-80-720 C.4.b for internal combustion powered generators used at a facility only when power is unavailable to the facility from the utility. These units were listed in the Insignificant Emission Units list in the previous Title V permit; however, they are now subject to the requirements of 40 CFR 63, Subpart ZZZZ. As a result, the Drydock #2 emergency generator and the emergency fire pump engine have been moved to the Emission Units table in Section II of the permit. Specific applicable requirements from Subpart ZZZZ have also been included for these units in Section VI.

The permittee is required to comply with the applicable monitoring, recordkeeping, and reporting requirements outlined in 40 CFR 63, Subpart ZZZZ for the Drydock #2 emergency generator and the emergency fire pump diesel engine. Specific requirements from Subpart ZZZZ have been included in the permit for clarity. Additional recordkeeping is required for the hours of operation of these units to ensure that they are operated for no more than 500 hours per year and, thus, to demonstrate their continued status as emergency engines under Virginia regulations.

Streamlined Requirements

There are no streamlined requirements for these emission units.

VIII. EMISSION UNIT APPLICABLE REQUIREMENTS - Facility-Wide

A. Testing

The permit requires construction of the facility in such a manner so as to allow for emissions testing at any time using appropriate methods.

The permit does not require source tests. The Department and EPA have authority to require testing not included in this permit if necessary to determine compliance with an emission limit or standard.

IX. GENERAL CONDITIONS

The permit contains general conditions required by 40 CFR Part 70 and 9 VAC 5-80-110 that apply to all Federal-operating permitted sources. These include requirements for submitting semi-annual monitoring reports and an annual compliance certification report. The permit also requires notification of deviations from permit requirements or any excess emissions.

Comments on General Conditions

B. Permit Expiration

This condition refers to the Board taking action on a permit application. The Board is the State Air Pollution Control Board. The authority to take action on permit application(s) has been delegated to the Regions as allowed by §2.2-604 and §10.1-1185 of the *Code of Virginia*, and the "Department of Environmental Quality Agency Policy Statement No. 3-2006".

F. Failure/Malfunction Reporting

Section 9 VAC 5-20-180 requires malfunction and excess emission reporting within four hours of discovery. Section 9 VAC 5-80-250 of the Title V regulations also requires malfunction reporting; however, reporting is required within two days. Section 9 VAC 5-20-180 is from the general regulations. All affected facilities are subject to section 9 VAC 5-20-180 including Title V facilities. Section 9 VAC 5-80-250 is from the Title V regulations. Title V facilities are subject to both sections. A facility may make a single report that meets the requirements of 9 VAC 5-20-180 and 9 VAC 5-80-250. The report must be made within four daytime business hours of discovery of the malfunction.

J. Permit Modification

This general condition cites the sections that follow:
9 VAC 5-80-50. Applicability, Federal Operating Permit For Stationary Sources
9 VAC 5-80-190. Changes to Permits.
9 VAC 5-80-260. Enforcement.
9 VAC 5-80-1100. Applicability, Permits For New and Modified Stationary Sources
9 VAC 5-80-1790. Applicability, Permits For Major Stationary Sources and Modifications Located in Prevention of Significant Deterioration Areas
9 VAC 5-80-2000. Applicability, Permits for Major Stationary Sources and Major Modifications Locating in Nonattainment Areas

U. Malfunction as an Affirmative Defense

The regulations contain two reporting requirements for malfunctions that coincide. The reporting requirements are listed in sections 9 VAC 5-80-250 and 9 VAC 5-20-180. The malfunction requirements are listed in General Condition U and General Condition F. For further explanation see the comments on general condition F.

Y. Asbestos Requirements

The Virginia Department of Labor and Industry under Section 40.1-51.20 of the Code of Virginia also holds authority to enforce 40 CFR 61 Subpart M, National Emission Standards for Asbestos.

X. INAPPLICABLE REQUIREMENTS

The source did not include specific inapplicable requirements in the permit application.

The startup, shut down, and malfunction opacity exclusion listed in 9 VAC 5-40-20 A 3 cannot be included in any Title V permit. This portion of the regulation is not part of the federally approved state implementation plan. The opacity standard applies to existing sources at all times including startup, shutdown, and malfunction. Opacity exceedances during malfunction can be affirmatively defended provided all requirements of the affirmative defense section of this permit are met. Opacity exceedances during startup and shut down will be reviewed with enforcement discretion using the requirements of 9 VAC 5-40-20 E, which state that "At all times, including periods of startup, shutdown, soot blowing and malfunction, owners shall, to the extent practicable, maintain and operate any affected facility including associated air pollution control equipment in a manner consistent with air pollution control practices for minimizing emissions."

XI. COMPLIANCE PLAN

There is no Compliance Plan associated with this permit. The facility is in compliance with all applicable requirements.

XII. INSIGNIFICANT EMISSION UNITS

The insignificant emission units are presumed to be in compliance with all requirements of the Clean Air Act as may apply. Based on this presumption, no monitoring, recordkeeping or reporting shall be required for these emission units in accordance with 9 VAC 5-80-110.

Insignificant emission units include the following:

Emission Unit Description	Citation	Pollutant(s) Emitted (9 VAC 5-80-720 B)	Rated Capacity 9 VAC 5-80-720 C)
Fiber glass lay-up on propeller shafts	9 VAC 5-80-720 B	VOC	N/A
Diesel cranes	9 VAC 5-80-720 B	VOC, NO_x, SO_2, PM, PM-10	N/A
Fuel tanks	9 VAC 5-80-720 B	VOC	N/A
Hydroblasting	9 VAC 5-80-720 A.65	None	N/A
Welding	9 VAC 5-80-720 B	Particulates (Manganese)	N/A
Machining operations (grinders, presses, lathes, etc.)	9 VAC 5-80-720 B	Particulates	N/A
Dissolved Air Flotation (DAF) wastewater treatment system with oil-water separator	9 VAC 5-80-720 B	VOC, HAPs	N/A

[1]The citation criteria for insignificant activities are as follows:
9 VAC 5-80-720 A - Listed Insignificant Activity, Not Included in Permit Application
9 VAC 5-80-720 B - Insignificant due to emission levels
9 VAC 5-80-720 C - Insignificant due to size or production rate

XIII. CONFIDENTIAL INFORMATION

The permittee did not submit a request for confidentiality. All portions of the Title V application are suitable for public review.

XIV. PUBLIC PARTICIPATION

The proposed permit will be placed on public notice in The Virginian Pilot from August 24, 2010 to September 23, 2010.