



# COMMONWEALTH of VIRGINIA

DEPARTMENT OF ENVIRONMENTAL QUALITY  
TIDEWATER REGIONAL OFFICE

5636 Southern Boulevard, Virginia Beach, Virginia 23462  
(757) 518-2000 Fax (757) 518-2009  
www.deq.virginia.gov

David K. Paylor  
Director

Maria R. Nold  
Regional Director

Molly Joseph Ward  
Secretary of Natural Resources

## STATEMENT OF LEGAL AND FACTUAL BASIS

BAE Systems Norfolk Ship Repair Inc.  
Norfolk, Virginia  
**Permit No. TRO-60246**

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, BAE Systems Norfolk Ship Repair Inc. has applied for a Title V Operating Permit for its Norfolk facility. The Department has reviewed the application and has prepared a draft Title V Operating Permit.

Permit Writer:

\_\_\_\_\_  
Cindy Keltner  
(757) 518-2167

Date: November 13, 2014

Regional Air Permits  
Manager:

\_\_\_\_\_  
Troy D. Breathwaite

Date: November 13, 2014

Regional Director:

\_\_\_\_\_  
Maria R. Nold

Date: November 13, 2014

## I. FACILITY INFORMATION

### Permittee

BAE Systems Norfolk Ship Repair Inc.  
750 West Berkley Avenue  
Norfolk, Virginia 23523

### Facility

BAE Systems Norfolk Ship Repair Inc.  
750 West Berkley Avenue  
Norfolk, Virginia 23523

**County-Plant Identification Number:** 51-710-00006

### A. SOURCE DESCRIPTION

NAICS Code: 336611 - Shipbuilding and Repairing. This facility provides comprehensive services for the repair and maintenance of marine vessels and their subsystems. Marine vessels may be worked in dry dock or along piers. Each ship repair is customized to the specific needs of the customer and may range from a simple repair to a comprehensive overhaul. Onsite support shops are available for all aspects of ship repair and maintenance and include electrical, hydraulic, engine, carpentry, machine, structural, and painting. The facility can provide electricity, steam, and compressed air to work crews as well as the ship while in dry dock.

The facility is a Title V major source of Hazardous Air Pollutants. This source is located in an attainment area for all pollutants. The facility is permitted under minor new source review permits issued on December 16, 1981, October 16, 1997, January 6, 2000, May 7, 2001, and May 22, 2014.

## II. COMPLIANCE STATUS

A full compliance evaluation of this facility, including a site visit, was conducted in June 4, 2013. In addition, all reports and other data required by permit conditions or regulations, which are submitted to DEQ, are evaluated for compliance. Based on these compliance evaluations, the facility has not been found to be in violation of any state or federal applicable requirements at this time.

### III. 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 and ID	Pollutant Controlled	Applicable Permit Date
003	2	Keeler, industrial boiler, residual No. 6 oil and slop oil (manufactured pre-1961)	32 mm Btu/hr	N/A	N/A	N/A
007-A	6	Stone Johnson, industrial boiler, No. 1 or 2 fuel oil (manufactured 1985)	20 mm Btu/hr	N/A	N/A	October 16, 1997
007-B	6	Stone Johnson, industrial boiler, natural gas (manufactured 1985)	20 mm Btu/hr	N/A	N/A	October 16, 1997
009-A	7	Stone Johnson, industrial boiler, No. 1 or 2 fuel oil (manufactured 1987)	31.5 mm Btu/hr	N/A	N/A	May 7, 2001
009-B	7	Stone Johnson, industrial boiler, natural gas (manufactured 1987)	31.5 mm Btu/hr	N/A	N/A	May 7, 2001
010-A	8	Cleaver Brooks, industrial boiler, No. 1 or 2 fuel oil (manufactured 1974)	33.4 mm Btu/hr	N/A	N/A	January 6, 2000
010-B	8	Cleaver Brooks, industrial boiler, natural gas (manufactured 1974)	33.4 mm Btu/hr	N/A	N/A	January 6, 2000
006	5	Painting (surface coating using airless sprayers) (pre-1972)		N/A	N/A	N/A
020	N/A	Abrasive blasting, surface preparation (pre-1972)		N/A	N/A	N/A
022	11	Carpenter shop, sawmill and woodworking (pre-1972)		Cyclone (C1)	PM, PM10	N/A
024	13	Shot blast cabinet (inside paint shop)	200 lb steel shot per hour	Baghouse (B1)	PM, PM10	N/A
023	12	Loading rack, slop oil	300 gallons per hour	N/A	N/A	N/A
TEG1		Titan Emergency Diesel Generator #1	970 kw/1,300 hp	N/A	N/A	N/A
ODEG1		Old Dominion Emergency generator #1	300 kW	N/A	N/A	N/A
ODEG2		MTU Emergency No. 2 fuel Generator	720 kw/965 hp	N/A	N/A	N/A
FEG1		Facility Emergency Diesel Generator #1	150 kW	N/A	N/A	N/A

FEG2		Facility Emergency Generator #2	750 kw/1,005 hp	N/A	N/A	N/A
FEG3		Facility Emergency Generator #3	750 kw/1,005 hp	N/A	N/A	N/A
G6G		CAT, Brushless Generator for Portal Crane, 3406C	298 kW/400 hp	N/A	N/A	May 22, 2014
G6EG		CAT, Brushless Generator for Portal Crane, 3304	72 kW/97 hp	N/A	N/A	May 22, 2014

#### IV. EMISSIONS INVENTORY

A copy of the 2013 annual emission update is attached. Emissions are summarized in the following tables.

2013 Actual Emissions

	2013 Criteria Pollutant Emission in Tons/Year				
VOC	CO	SO <sub>2</sub>	PM <sub>10</sub>	PM <sub>2.5</sub>	NO <sub>x</sub>
33.3	6.2	0.05	25.0	0.01	7.5

2013 Facility Hazardous Air Pollutant Emissions

Pollutant	2013 Hazardous Air Pollutant Emission in Tons/Yr
NH <sub>3</sub>	0.02

#### REQUESTED MODIFICATION AND REASON FOR MODIFICATION

BAE Systems Norfolk Ship Repair has requested the inclusion of a 72 kW/97 hp emergency generator (ID G6EG) and a 298 kW/400 hp non-emergency generator (ID G6G) in the permit. MACT Subpart ZZZZ does apply to these units. These units have been added to Sections II and VII of the permit as significant units.

#### APPLICABILITY OF 9 VAC 5-80-230

This permit modification will be processed using the Significant Modification Procedures as defined in 9 VAC 5-80-230. The changes to the permit involve significant changes to existing monitoring, reporting, or recordkeeping requirements in the permit, such as a change to the method of monitoring to be used, a change to the method of demonstrating compliance or a relaxation of reporting or recordkeeping requirements.

#### CHANGES TO TITLE V OPERATING PERMIT

This Title V modification is for the incorporation of an emergency generator to Sections II and XIII of the permit.

#### PUBLIC PARTICIPATION

The public participation requirements of 9 VAC 5-80-270 do apply to this significant permit modification. A 30-day public notice is required as well as a 45-day EPA review is required.

**PERMIT REVIEW BY EPA AND AFFECTED STATES**

The EPA and affected states review requirements of 9 VAC 5-80-290 apply to this significant permit modification. A 45-day EPA review period is required. North Carolina is an affected state, and will be notified of this minor permit modification.

**V. CONFIDENTIAL INFORMATION**

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

**VI. PUBLIC PARTICIPATION**

The proposed permit will be placed on public notice in the Virginian-Pilot newspaper from Tuesday, September 9, 2014 to Thursday, October 9, 2014.