

**COMMONWEALTH OF VIRGINIA**  
**Department of Environmental Quality**  
**Piedmont Regional Office**

**STATEMENT OF LEGAL AND FACTUAL BASIS**

Bear Island Paper WB LLC  
10026 Old Ridge Road, Ashland, Virginia  
Permit No. PRO50840

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, Bear Island Paper WB LLC has applied for a modification of the Title V Operating Permit for its 10026 Old Ridge Road, Ashland, Virginia facility. The Department has reviewed the application and has prepared a draft modification of the Title V Operating Permit.

Permit Writer/Permit Contact:  Date: 4/4/2016  
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## **FACILITY INFORMATION**

### **Permittee**

Bear Island Paper WB LLC  
10026 Old Ridge Road  
Ashland, Va 23005

### **Facility**

Bear Island Paper WB LLC  
10026 Old Ridge Road  
Ashland, Virginia

County Plant ID Number: 085-0042

## **SOURCE DESCRIPTION**

NAICS Code: 322122- Newsprint Mill. SIC Code: 2621- Pulp Mill establishments primarily engage in manufacturing pulp from wood or from other materials, such as rags, linters, wastepaper, and straw. Establishments engaged in integrating logging and pulp mill operations are classified according to the primary products shipped. Establishments engaged in integrated operations of producing pulp and manufacturing paper, paperboard, or products thereof are classified in Industry 2621 if primarily shipping paper or paper products.

The facility manufactures newsprint. The facility mixes newsprint made from trees with recycled paper. Bear Island Paper Company manufacturing facility consists of the following: wood yard, thermomechanical paper mill (TMP), combination boiler, package boiler, wastewater treatment plant, recycle plant, paper mill and supporting operating.

The facility is a Title V major source of Particulate Matter (PM), PM-10, PM 2.5, NOx, SO<sub>2</sub>, CO, and VOC. The source is located in an attainment area for all pollutants. A RACT Consent Agreement was established on July 12, 1996. The facility is currently permitted under a State Operating Permit issued on December 17, 2015 (SOP) and its initial Title V permit originally effective January 1, 2005 and renewed on September 24, 2014. The current permit action is for a minor modification based on the latest issuance of the SOP. The application for the minor modification was received on January 11, 2016 by the Virginia Department of Environmental Quality (DEQ) and was deemed administratively complete January 28, 2016.

## **COMPLIANCE STATUS**

A full compliance evaluation of this facility, including a site visit, has been conducted. 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.

**EMISSION UNIT AND CONTROL DEVICE IDENTIFICATION**

Note: Only emission units associated with the requested modification have been listed below:

<b>Emission Unit ID</b>	<b>Stack ID</b>	<b>Emission Unit Description</b>	<b>Size/Rated Capacity</b>	<b>Pollution Control Device Description (PCD)</b>	<b>PCD ID</b>	<b>Pollutant Controlled</b>	<b>Applicable Permit Date</b>
<b>Fuel Burning Equipment: COMBINATION BOILER (B&amp;W) - Unit Ref. #2 - MACT (40 CFR 63, Subpart DDDDD)</b>							
2 (PH-1A)	PHS-1	Babcock & Wilcox Combination Boiler Coal – primary fuel	243 mmBtu/hr	Multi-cyclone and Electrostatic Precipitator	PHC-1A PHC -1B	PM/PM-10	State Operating Permit (SOP) 12/17/15
2 (PH-1B)	PHS-1	Babcock & Wilcox Combination Boiler Bark/Paper Sludge/Wood Chips/Combustion – primary fuel	147.4 mmBtu/hr	Multi-cyclone and Electrostatic Precipitator	PHC-1A PHC -1B	PM/PM-10	SOP 12/17/15
2 (PH-1C)	PHS-1	Babcock & Wilcox Combination Boiler Number 2 Fuel Oil - secondary fuel	243 mmBtu/hr	Multi-cyclone, Electrostatic Precipitator and low sulfur fuels not to exceed 0.2%	PHC-1A PHC -1B	PM, PM-10, SO <sub>2</sub>	SOP 12/17/15
2 (PH-1ABC)	PHS-1	Babcock & Wilcox Combination Boiler Natural Gas – start up, primary fuel	5.2 mmBtu/hr	Multi-cyclone and Electrostatic Precipitator	PHC-1A PHC -1B	PM/PM-10	SOP 12/17/15
2 (PH-1ABC)	PHS-1	Babcock & Wilcox Combination Boiler Propane – start up, primary fuel	12.5 mmBtu/hr	Multi-cyclone and Electrostatic Precipitator	PHC-1A PHC -1B	PM/PM-10	SOP 12/17/15

Emission Unit ID	Stack ID	Emission Unit Description	Size/Rated Capacity	Pollution Control Device Description (PCD)	PCD ID	Pollutant Controlled	Applicable Permit Date
<b>Fuel Burning Equipment: PACKAGE BOILER - Unit Ref. #3 – NSPS (40 CFR 60 Subpart Db), MACT (40 CFR 63, Subpart DDDDD)</b>							
3 (PH2-2A)	PHS-2	Package Boiler Natural Gas/Propane Combustion -	243.83 mmBtu/hr	Clean burning fuels	None	PM/PM-10	SOP 12/17/15
3 (PH2-2B)	PHS-2	Package Boiler Number 2 Fuel Oil – secondary fuel	247 mmBtu/hr	Low sulfur fuels, not to exceed 0.2% and low nitrogen fuels, not to exceed 0.3% by weight.	None	SO2 & NOX	SOP 12/17/15

**EMISSIONS INVENTORY**

Emissions are summarized in the following tables.

<u>2014 Facility Criteria Pollutant Emissions in TPY</u>							
Pollutants	PM	PM10	PM2.5	NOx	SO2	CO	VOC
TPY Totals	86.2	84.1	84.1	242.3	354.2	268.0	497.1

<b>2014 Facility Hazardous Air Pollutant Emissions in TPY</b>	
<b>Pollutants</b>	<b>TPY Totals</b>
Acetaldehyde (ACETA)	11.4
Benzene (BZ)	0.02
Chloroform (CLFM)	1.3
Chromium (CRC)	0.02
Formaldehyde (FORM)	0.03
Hydrochloric acid (HCL)	13.1
Manganese (MNC)	0.02
Methyl ethyl ketone (METETN)	0.3
Methanol (MTHOL)	12.8
Nickel (NIC)	0.01
Ammonia (NH3)	0.7
Hexane (NHEXA)	0.1
Lead (PB)	0.1
Phenol (PHNL)	0.05
Styrene (STYR)	0.01
Methyl chloroform (TCA)	0.02
<b>Total</b>	<b>39.98</b>

## **EMISSION UNIT APPLICABLE REQUIREMENTS**

This Statement of Basis addresses a minor permit modification to the Title V permit for changes that were made to the SOP. The changes to the SOP include the following: the removal of the requirement of the combination boiler to burn coal when firing biomass in excess of 450 tpd, the removal of the hours of operation limitation for the package boiler, the requirements of NSPS Db were updated for the package boiler, and CO, NO<sub>x</sub>, and VOC emission limits for the package boiler in condition IV.A.6 of the Title V permit were updated based on typographical errors

Though the requirement of the combination boiler to burn coal when firing biomass was removed from the SOP it does not cause it to be less stringent, since the condition required the combustion of the worst case fuel and the requirement was not based on a BACT or RACT determination. It appears that this condition was originally included as a measure to control/limit CO and VOC emissions. The CO emissions are controlled/limited and monitored as required by condition 9 of the SOP. The VOC emissions are controlled as required by condition 7 of the SOP. A stack test requirement was included in the SOP to verify that the CO and VOC emission limits are achievable while the boiler is combusting biomass in excess of 450 tpd and not combusting coal.

The package boiler hours of operation limitation and associated records requirements were determined to be redundant since the SOP has fuel throughput limits/records which are directly correlated with the hours of operation. These requirements were not based on a BACT determination. For these reasons the removal of these conditions were not considered a relaxation.

The NSPS Db requirements associated with the package boiler were updated for another approved method (40 CFR 60.48b (g)(2)) under the regulation, which is not considered a significant change or a relaxation.

All other requirements as detailed and explained in the prior Statement of Basis are still valid.

### **B&W COMBINATION BOILER - Unit Ref. #2**

#### **Testing**

Condition 29 of the SOP requires CO and VOC emissions testing and has been included in the Title V permit.

#### **Obsolete Conditions**

Former operating limitation condition III.A.5 and recordkeeping condition III.C.1 f of the Title V permit were removed since they are no longer in the underlying SOP.

### **PACKAGE BOILER – Unit Ref. #3**

#### **Limitations**

Condition 24 of the SOP includes updated emission limitations (correction of typographical errors) and has been included in the Title V permit.

#### **Monitoring**

Condition 13 of the SOP includes NO<sub>x</sub> monitoring requirements based on 40 CFR 60 Subpart Db and has been included in the Title V permit.

#### **Recordkeeping**

Condition IV.C.1.d of the Title V has been included to meet the Part 70 periodic monitoring requirements.

#### **Obsolete Conditions**

The former hours of operation limitation and corresponding recordkeeping requirement conditions IV A.6 and IV.C.1.c. of the Title V have been removed since they no longer are in the underlying SOP.

The former operation limitation condition IV.A.7 of the Title V has been removed since it no longer is in the underlying SOP and has been replaced with an alternate monitoring requirement of the regulation.

The portion of condition IV.B.4 of the Title V that included monitoring requirements based on 40 CFR 60 Subpart Db has been removed since it no longer is in the underlying SOP and has been replaced with an alternate monitoring requirement of the regulation.

The former recordkeeping condition IV.C.1.e. of the Title V has been removed since it no longer is in the underlying SOP and has been replaced with an alternate monitoring requirement of the regulation.

The portion of condition IV D.1 of the Title V that included monitoring/testing requirements based on 40 CFR 60 Subpart Db has been removed since it no longer is in the underlying SOP and has been replaced with an alternate monitoring requirement of the regulation.

The portion of reporting condition IV.E.2 of the Title V that included reporting requirements based on 40 CFR 60 Subpart Db has been removed since it no longer is in the underlying SOP and has been replaced with an alternate monitoring requirement of the regulation.

## **FACILITY-WIDE**

### **Obsolete Conditions**

Former conditions XIII B.d, e, h and i of the Title V were duplicate conditions and therefore have been removed.

**STREAMLINED REQUIREMENTS** - There are no changes or additions of streamlined requirements associated with this modification.

**GENERAL CONDITIONS**- There are no changes or additions of streamlined requirements associated with this modification.

**STATE ONLY APPLICABLE REQUIREMENTS** – There are no changes or additions of streamlined requirements associated with this modification

**FUTURE APPLICABLE REQUIREMENTS** - There are no changes or additions of streamlined requirements associated with this modification.

**INAPPLICABLE REQUIREMENTS** - There are no changes or additions of streamlined requirements associated with this modification.

**INSIGNIFICANT EMISSION UNITS** - There are no changes or additions of streamlined requirements associated with this modification.

## **CONFIDENTIAL INFORMATION**

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

## **PUBLIC PARTICIPATION**

The public participation requirements do not extend to minor permit modifications (9 VAC 5-80-210 D). The EPA review period ended on April 3, 2016. EPA did not comment on this final draft.