



# **COMMONWEALTH of VIRGINIA**

## **DEPARTMENT OF ENVIRONMENTAL QUALITY**

TIDEWATER REGIONAL OFFICE

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Molly Joseph Ward  
Secretary of Natural Resources

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Director

Maria R. Nold  
Regional Director

### **STATEMENT OF LEGAL AND FACTUAL BASIS**

International Paper - Franklin Mill

Franklin, Virginia

**Permit No.: TRO - 60214**

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 9VAC5 Chapter 80, International Paper - Franklin Mill has applied for a Title V Operating Permit for its Franklin facility. The Department has reviewed the application and has prepared a Title V Operating Permit.

Permit Writer/Contact:

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Date: January 22, 2015

Regional Air Permits Manager:

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Troy D. Breathwaite

Date: January 22, 2015

Regional Director:

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

Date: January 22, 2015

## I. FACILITY INFORMATION

### **Permittee and Facility**

International Paper Franklin Mill  
34040 Union Camp Drive  
Franklin, VA 23851

### **Responsible Official**

Charles Levell Hairston  
Mill Manager

### **NO<sub>x</sub> Budget Trading Authorized Account Representative**

Howard Gray  
Environmental Engineer

### **Facility Contact Person**

Howard Gray  
(757) 569-4535

**AFS Identification Number:** 51-093-00006

**ORIS Code and/or EIA Facility ID:** 52152

### **Facility Description:**

NAICS 322110 - Pulp Mill (SIC 2611),

International Paper produces fluff pulp and turpentine from logs and wood chips using the Kraft pulping process. The mill has the capability of generating most of the power used at this mill.

There are 9 major parts of this fluff pulp operation as listed in the application: 1) the Wood Yard process area; 2) the Unbleached Pulp Mill process area; 3) the Caustic Recovery process area; 4) the Chemical Recovery process area; 5) the Bleach Plant process area; 6) the Pulp Machine process area; 7) the Power House process area; 8) the Wastewater Treatment System process area; and 9) Miscellaneous processes.

This plant is operating under a Federally Enforceable State Operating Permit (FESOP) dated March 31, 2006, amended on April 3, 2012, which includes the site-wide emissions cap conditions. The site-wide emission cap includes emissions from other companies operating equipment at the site. This permit is only for the International Paper operations.

This facility was granted a regulatory variance allowing DEQ to cap the emissions of 10 pollutants in 2005. The variance also waives the requirement for minor or major source permitting prior to construction projects at the facility. The site-specific regulation is codified at 9VAC5 Chapter 230. The facility and other companies operating onsite will continue to operate under the site-wide emission cap. International Paper is the facility that manages the emission cap and reports emissions for the facility, but this permit will only include the equipment and emission sources that are directly operated by International Paper.

## II. COMPLIANCE STATUS

A full compliance evaluation of this facility, including a site visit, was conducted on July 2, 2013. In addition, all reports and other data required by permit conditions or regulations, which are submitted to DEQ, were evaluated for compliance. Based on these compliance evaluations, the facility has not been found to be in violation of any state or federal applicable Air requirements at this time.

### III. EMISSIONS INVENTORY

2013 Emissions are from International Paper and all the site-tenants generating emissions at this time. The facility wide emissions are summarized in the following tables:

#### 2013 Actual Emissions

| 2013 Criteria Pollutant Emissions in Tons/Year |       |       |                 |                  |                 |
|--|-------|-------|-----------------|------------------|-----------------|
| Pollutant                                      | VOC   | CO    | SO <sub>2</sub> | PM <sub>10</sub> | NO <sub>x</sub> |
| Total  | 219.3 | 386.8 | 242.8           | 357.3            | 468.9           |

| 2013 Hazardous Air Pollutant Emissions in Tons/Year |                    |                   |                    |       |
|---|--------------------|-------------------|--------------------|-------|
| Pollutant   | Chlorine           | Hydrogen Chloride | Hydrogen Fluoride  |       |
| Total   | 3.4                | 41.8              | 0.8                |       |
|   | Methylene Chloride | Perchloroethylene | Sulfuric Acid Mist | TRS   |
| Total   | 0.5                | 0.4               | 6.4                | 113.2 |

#### IV. EMISSIONS UNITS

Equipment to be operated consists of:

| Emission Unit ID              | Stack ID                          | Emission Unit Description  | Size/Rated Capacity <sup>1</sup> | Pollution Control Device (PCD) Description   | PCD ID       | Pollutant Controlled |
|-------------------------------|-----------------------------------|--|----------------------------------|--|--------------|----------------------|
| <b>Wood Yard Process Area</b> |                                   |  |                                  |  |              |                      |
| WDY01                         | N/A                               | Traffic – Log Hauling (paved road)   | 75,000 mi./yr.                   | -  | -            | -                    |
| WDY02                         | N/A                               | Traffic – Chip Hauling (paved road)  | 50,000 mi./yr.                   | -  | -            | -                    |
| WDY06                         | N/A                               | Slashing Process   | 2,500,000 tons/yr                | -  | -            | -                    |
| WDY08                         | N/A                               | Debarking/Chipping   | 2,500,000 tons/yr                | -  | -            | -                    |
| WDY14                         | N/A                               | Wind Erosion – Bark Pile   | N/A                              | -  | -            | -                    |
| WDY16                         | N/A                               | Screening/Rechipping   | 4,000,000 tons/yr                | -  | -            | -                    |
| <b>Unbleached Pulp Mill</b>   |                                   |  |                                  |  |              |                      |
| UPM02 <sup>(2)</sup>          | CRESV03A,<br>CRESV03B,<br>CAUSV03 | <b>K1 Digester Continuous Digester System</b>  | 50 ADT/hr.                       | No. 6 Recovery Furnace or<br>No. 4 Lime Kiln | CRE03, CAU03 | TRS, VOC             |
|                               |                                   | Kamyr Condensers from K1 digester  | -                                |  |              |                      |
| UPM06 <sup>(2)</sup>          | CRESV03A,<br>CRESV03B             | <b>D Wash Line</b>   | 50 ADT/hr.                       | No. 6 Recovery Furnace                       | CRE03        | TRS, VOC,<br>HAPs    |
|                               |                                   | D Seal (Filtrate) Tank   |                                  |  |              |                      |
|                               |                                   | D Washer   |                                  |  |              |                      |
|                               |                                   | D Decker Filtrate Tank   |                                  |  |              |                      |
|                               | D Accepts Tank                    |  |                                  |  |              |                      |
| UPM07                         | UPMSV07                           | <b>A Noss Screens</b>  | 29.2 ADT/hr.                     | -  | -            | -                    |
| UPM08                         | UPMSV08                           | <b>B Noss Screens</b>  | 29.2 ADT/hr.                     | -  | -            | -                    |
| UPM13                         | CRESV03A,<br>CRESV03B             | <b>E Decker</b>  | 50 ADT/hr.                       | No. 6 Recovery Furnace                       | CRE03        | TRS, VOC,<br>HAPs    |
| UPM14                         | UPMSV14                           | <b>A Knotter</b>   | 29.2 ADT/hr.                     | -  | -            | -                    |
| UPM15                         | UPMSV15                           | <b>B Knotter</b>   | 29.2 ADT/hr.                     | -  | -            | -                    |
| UPM19 <sup>(2)</sup>          | CRESV03A,<br>CRESV03B,<br>CAUSV03 | <b>K1 Chip Bin</b>   | -                                | No. 6 Recovery Furnace or<br>No. 4 Lime Kiln | CRE03, CAU03 | TRS, VOC             |
|                               |                                   | Kamyr Chip Bin Separator Condenser   |                                  |  |              |                      |
| UPM20 <sup>(2)</sup>          | CRESV03A,<br>CRESV03B,<br>CAUSV03 | <b>Turpentine System</b>   | 180 gal/hr                       | No. 6 Recovery Furnace or<br>No. 4 Lime Kiln | CRE03, CAU03 | TRS, VOC             |
|                               |                                   | No.1 Storage Tank  |                                  |  |              |                      |
|                               |                                   | Decanter   |                                  |  |              |                      |
|                               |                                   | Decanter Underflow Tank  |                                  |  |              |                      |
|                               |                                   | No.2 Storage Tank  |                                  |  |              |                      |
|                               | Padding Water Collection Tank     |  |                                  |  |              |                      |
| UPM21                         | UPMSV19                           | <b>Vertical Foam Tank</b><br>Not scheduled for immediate use, but if used will be part of HVLC collection system | 8,760 hr/yr                      | No. 6 Recovery Furnace                       | CRE03        | TRS, VOC,<br>HAPs    |

| Emission Unit ID                     | Stack ID                          | Emission Unit Description  | Size/Rated Capacity <sup>1</sup> | Pollution Control Device (PCD) Description                                  | PCD ID                | Pollutant Controlled |
|--------------------------------------|-----------------------------------|--|----------------------------------|---|-----------------------|----------------------|
| UPM26                                | -                                 | <b>D Wash HVLC System Venting</b>  | -                                | -   | -                     | -                    |
| UPM28 <sup>(2)</sup>                 | CRESV03A,<br>CRESV03B,<br>CAUSV03 | D-Blow Tank  | 50 ADT/hr                        | No. 6 Recovery Furnace or<br>No. 4 Lime Kiln                                | CRE03, CAU03,         | TRS, VOC             |
| UPM29                                | -                                 | <b>K1 Chip Bin LVHC System Venting</b>   | -                                | -   | -                     | -                    |
| UPM30 <sup>(2)</sup>                 | CRESV03A,<br>CRESV03B,<br>CAUSV03 | <b>Condensation Collection Tank</b>  | 8,760 hr/yr                      | No. 6 Recovery Furnace or<br>No. 4 Lime Kiln and the<br>Condensate Stripper | CRE03, CAU03<br>CRE16 | TRS, VOC             |
| UPM31                                | -                                 | <b>Turpentine System Venting</b>   | -                                | -   | -                     | -                    |
| <b>Caustic Recovery Process Area</b> |                                   |  |                                  |   |                       |                      |
| CAU03 <sup>(3)</sup>                 | CAUSV03                           | <b>No. 4 Lime Kiln (1977)</b>  | 15.0 tons CaO/hr                 | Variable throat venturi<br>Scrubber   | CAUCD03               | PM/PM10/<br>PM2.5    |
|                                      | CAUSV03                           | <b>No. 4 Lime Kiln (1977)</b>  | 100 mmBtu/hr                     | -   | -                     | -                    |
| CAU04                                | CAUSV04                           | <b>No. 5 Slaker (1970)<br/>Not scheduled for immediate use</b>                           | 74.6 ADTP/hr                     | Fixed throat venturi<br>Scrubber  | CAUCD04               | PM/PM10/<br>PM2.5    |
| CAU05                                | CAUSV05                           | <b>No. 6 Slaker (1970)</b>   | 74.6 ADTP/hr                     | Fixed throat venturi<br>Scrubber  | CAUCD05               | PM/PM10/<br>PM2.5    |
| CAU06                                | CAUSV06                           | <b>Green Liquor Handling</b>   | 310,250 tons CaO/yr              | -   | -                     | -                    |
|                                      | -                                 | Green Liquor Surge Tank  | -                                | -   | -                     | -                    |
|                                      | -                                 | Green Liquor Spill Tank  | -                                | -   | -                     | -                    |
|                                      | -                                 | Green Liquor Clarifiers (2)  | -                                | -   | -                     | -                    |
|                                      | -                                 | No. 3 White Liquor Clarifier **<br>** (used as "swing" clarifier. White or Green liquor) | -                                | -   | -                     | -                    |
|                                      | -                                 | Green Liquor Standpipe   | -                                | -   | -                     | -                    |
|                                      | -                                 | Green Liquor Day Tank  | -                                | -   | -                     | -                    |
|                                      | -                                 | Green Liquor Coolers (4)   | -                                | -   | -                     | -                    |
|                                      | -                                 | Dregs Filter Mix Tanks   | -                                | -   | -                     | -                    |
|                                      | -                                 | Dregs Filter Hoods   | -                                | -   | -                     | -                    |
|                                      | -                                 | Dregs Filter Vacuum Pumps  | -                                | -   | -                     | -                    |
|                                      | -                                 | Dregs Filter Dump Tank   | -                                | -   | -                     | -                    |
| CAU07                                | CAUSV07                           | <b>White Liquor Handling</b>   | 310,250 tons CaO/yr              | -   | -                     | -                    |
|                                      | -                                 | Grits Mix Tank   | -                                | -   | -                     | -                    |
|                                      | -                                 | Grits Washers (2)  | -                                | -   | -                     | -                    |
|                                      | -                                 | Grits Washwater Return Standpipe   | -                                | -   | -                     | -                    |
|                                      | -                                 | Causticizers (8)   | -                                | -   | -                     | -                    |
|                                      | -                                 | Causticizer Standpipe  | -                                | -   | -                     | -                    |

| Emission Unit ID                      | Stack ID           | Emission Unit Description   | Size/Rated Capacity <sup>1</sup>              | Pollution Control Device (PCD) Description                        | PCD ID              | Pollutant Controlled |
|---------------------------------------|--------------------|---|---|---|---------------------|----------------------|
| CAU07<br>(cont)                       | -                  | White Liquor Clarifiers (4)   | -   | -   | -                   | -                    |
|                                       | -                  | White Liquor Standpipes (2)   | -   | -   | -                   | -                    |
|                                       | -                  | White Liquor Day Tank   | -   | -   | -                   | -                    |
|                                       | -                  | Reserve Tanks (5), one reserve tank for green liquor, one reserve tank for white or green liquor, and three reserve tanks for black or white liquor | -   | -   | -                   | -                    |
| CAU08                                 | CAUSV08            | <b>Lime Mud Handling</b>  | 310,250 tons CaO/yr                           | -   | -                   | -                    |
|                                       | -                  | Unwashed Mud Mix Tank   | -   | -   | -                   | -                    |
|                                       | -                  | Lime Mud Pressure Filter Feed Tanks (2)   | -   | -   | -                   | -                    |
|                                       | -                  | Lime Mud Pressure Filters (2)   | -   | -   | -                   | -                    |
|                                       | -                  | #7 Mud Washer   | -   | -   | -                   | -                    |
|                                       | -                  | Washed Mud Mix Tank   | -   | -   | -                   | -                    |
|                                       | -                  | Lime Mud Storage Tanks (4)  | -   | -   | -                   | -                    |
|                                       | -                  | Dewatering Aid Tank   | -   | -   | -                   | -                    |
| CAU09                                 | N/A                | <b>Lime Handling</b>  | 310,250 tons CaO/yr                           | -   | -                   | -                    |
|                                       | -                  | Lime Collection Conveyor  | -   | -   | -                   | -                    |
|                                       | -                  | Lime Bucket Elevator  | -   | -   | -                   | -                    |
|                                       | -                  | Hot Lime Storage Bin  | -   | -   | -                   | -                    |
|                                       | -                  | Fresh Lime Storage Bin  | -   | -   | -                   | -                    |
|                                       | -                  | Purchased Lime Unloading Screw Conveyor   | -   | -   | -                   | -                    |
|                                       | -                  | Purchased Lime Transfer Conveyor  | -   | -   | -                   | -                    |
|                                       | -                  | Purchased Lime Bucket Elevator  | -   | -   | -                   | -                    |
| CAU10                                 | CAUSV10            | <b>Fillback Storage</b>   | 310,250 tons CaO/yr                           | -   | -                   | -                    |
|                                       | -                  | Fillback Tank   | -   | -   | -                   | -                    |
|                                       | -                  | Fillback Standpipe  | -   | -   | -                   | -                    |
| CAU13                                 | N/A                | <b>No. 4 Lime Kiln Mud Disc Filter</b>  | 15.0 tons CaO/hr                              | -   | -                   | -                    |
| CAU14                                 | CRESV03A,          | <b>LVHC Collection System Drains and Tanks</b>  | -   | No. 6 Recovery Furnace or No. 4 Lime Kiln and Condensate Stripper | CRE03, CAU03, CRE16 | TRS, VOC HAPs        |
|                                       | CRESV03B,          | 4LK Chip Bin Foul Condensate Tank   |   |   |                     |                      |
|                                       | CAUSV03            | 4LK Foul Condensate Tank  |   |   |                     |                      |
| <b>Chemical Recovery Process Area</b> |                    |   |   |   |                     |                      |
| CRE03 <sup>(3)</sup>                  | CRESV03A, CRESV03B | <b>No. 6 Recovery Furnace (1977)</b>  | 209,000 lb/hr BLS<br>935 MMBtu/hr natural gas | No. 6 RF ESP  | CRECD03             | PM/PM10/<br>PM2.5    |
|                                       |                    | 6 RF precipitator mix tank  | -   | -   | -                   | -                    |
|                                       |                    | 6 RF saltcake mix tank  | -   | -   | -                   | -                    |
| CRE06 <sup>(3)</sup>                  | CRESV06A, CRESV06B | <b>No. 6 Rec. Smelt Dissolving Tank (1977)</b>  | 209,000 lb/hr BLS                             | No 6 SDT Scrubbers  | CRECD06A, CRECD06B  | PM10/PM2.5           |

| Emission Unit ID     | Stack ID                          | Emission Unit Description  | Size/Rated Capacity <sup>1</sup> | Pollution Control Device (PCD) Description                              | PCD ID               | Pollutant Controlled |
|----------------------|-----------------------------------|--|----------------------------------|---|----------------------|----------------------|
| CRE08 <sup>(2)</sup> | CRESV03A,<br>CRESV03B,<br>CAUSV03 | <b>E Set Evaporators (1974)</b>  | 1,600 gpm WBL                    | No. 6 Recovery Furnace or<br>No. 4 Lime Kiln                            | CRE03, CAU03         | TRS, VOC<br>HAPs     |
| CRE09 <sup>(2)</sup> | CRESV03A,<br>CRESV03B,<br>CAUSV03 | <b>F Set Evaporators (1977)</b>  | 450 gpm WBL<br>750 gpm IBL       | No. 6 Recovery Furnace or<br>No. 4 Lime Kiln                            | CRE03, CAU03         | TRS, VOC<br>HAPs     |
| CRE10 <sup>(2)</sup> | CRESV03A,<br>CRESV03B,<br>CAUSV03 | <b>G Set Evaporators (1986)<br/>40 CFR Part 60, Subpart BB</b>                 | 744,500lb/hr evap                | No. 6 Recovery Furnace or<br>No. 4 Lime Kiln                            | CRE03, CAU03         | TRS, VOC<br>HAPs     |
| CRE11                | CRESV07                           | <b>Weak Black Liquor Storage</b>   | 8,760 hrs.                       | -   | -                    | -                    |
|                      | -                                 | #1 Weak Black Liquor Tank  | -                                | -   | -                    | -                    |
|                      | -                                 | #2 Dump tank   | -                                | -   | -                    | -                    |
|                      | -                                 | #2 Weak black liquor tank  | -                                | -   | -                    | -                    |
|                      | -                                 | #3 Weak black liquor tank  | -                                | -   | -                    | -                    |
|                      | -                                 | #1 Dump tank   | -                                | -   | -                    | -                    |
| CRE12                | CRESV08                           | <b>Intermediate Black Liquor Storage</b>                                       | 8,760 hrs                        | -   | -                    | -                    |
|                      | -                                 | #1 Reserve tank  | -                                | -   | -                    | -                    |
|                      | -                                 | #5 Reserve tank  | -                                | -   | -                    | -                    |
|                      | -                                 | #6 Reserve tank  | -                                | -   | -                    | -                    |
|                      | -                                 | #3 Heavy Black liquor tank   | -                                | -   | -                    | -                    |
|                      | -                                 | #1 BLOX Tank   | -                                | -   | -                    | -                    |
| CRE13                | CRESV09                           | <b>Heavy Black Liquor Storage</b>  | 8,760 hrs                        | -   | -                    | -                    |
|                      | -                                 | 73% black liquor tank  | -                                | -   | -                    | -                    |
| CRE15                | CRESV03A,<br>CRESV03B,<br>CAUSV03 | <b>Pulping Process Condensate Collection Tank &amp; Stripper<br/>Feed Tank</b> | 8,760 hrs                        | No. 6 Recovery Furnace or<br>No. 4 Lime Kiln                            | CRE03, CAU03         | TRS, VOC             |
| CRE16 <sup>(2)</sup> | CRESV03A,<br>CRESV03B,<br>CAUSV03 | <b>Condensate Stripper System</b>  | 1,140 gpm                        | No. 6 Recovery Furnace or<br>No. 4 Lime Kiln                            | CRE03, CAU03         | TRS, VOC             |
| CRE16                | -                                 | <b>Condensate Stripper Off Gas Venting</b>                                     | -                                | -   | -                    | -                    |
| CRE18 <sup>(2)</sup> | CRESV03A,<br>CRESV03B,<br>CAUSV03 | <b>LVHC Collection System Drains &amp; Tanks</b>                               | -                                | No. 6 Recovery Furnace or<br>No. 4 Lime Kiln and<br>Condensate Stripper | CRE03,<br>CAU03CRE16 | TRS, VOC<br>HAPs     |
|                      |                                   | Foul Condensate Tank #1  |                                  |   |                      |                      |
|                      |                                   | Foul Condensate Tank #2  |                                  |   |                      |                      |
|                      |                                   | Chip Bin Foul Condensate Tank  |                                  |   |                      |                      |
|                      |                                   | Kiln Foul Condensate Tank  |                                  |   |                      |                      |

| Emission Unit ID                 | Stack ID                          | Emission Unit Description  | Size/Rated Capacity <sup>1</sup> | Pollution Control Device (PCD) Description                              | PCD ID                | Pollutant Controlled  |
|----------------------------------|-----------------------------------|--|----------------------------------|---|-----------------------|-----------------------|
|                                  |                                   | 6RB Foul Condensate Tank (LVHC)  |                                  |   |                       |                       |
| CRE19 <sup>(2)</sup>             | CRESV03A,<br>CRESV03B,<br>CAUSV03 | <b>Stripper Off Gas System Drains &amp; Tanks</b>                                  | -                                | No. 6 Recovery Furnace or<br>No. 4 Lime Kiln and<br>Condensate Stripper | CRE03, CAU03<br>CRE16 | TRS, VOC<br>HAPs      |
|                                  |                                   | #1 Gas Line Drain Pot  |                                  |   |                       |                       |
|                                  |                                   | #2 Gas Line Drain Pot  |                                  |   |                       |                       |
|                                  |                                   | Low Pressure TRS Gas Line Drain Pot  |                                  |   |                       |                       |
|                                  |                                   | Methanol Condenser Storage Tank  |                                  |   |                       |                       |
| CRE20                            | -                                 | <b>Evaporators Venting</b>   | -                                | -   | -                     | -                     |
| CRE21                            | -                                 | <b>BLOX Condenser Vent</b>   | -                                | -   | -                     | -                     |
| CRE22 <sup>(2)</sup>             | CRESV03A,<br>CRESV03B,<br>CAUSV03 | <b>HVLC Gas Collection System - Condensate Drains &amp; Tanks</b>                  | -                                | No. 6 Recovery Furnace or<br>No. 4 Lime Kiln and<br>Condensate Stripper | CRE03, CAU03<br>CRE16 | TRS, VOC<br>HAPs      |
|                                  |                                   | F O <sub>2</sub> / D Wash Foul Condensate Tank                                     |                                  |   |                       |                       |
|                                  |                                   | BLOX Foul Condensate Tank  |                                  |   |                       |                       |
|                                  |                                   | RB6 Foul Condensate Tank (HVLC)  |                                  |   |                       |                       |
| CRE23                            | -                                 | <b>Pulping Process Condensate Collection Tank &amp; Stripper Feed Tank Venting</b> | -                                | -   | -                     | -                     |
| CRE24/<br>BLP13                  | -                                 | <b>HVLC Gas Collection System Venting at No. 6 Recovery Furnace</b>                | -                                | -   | -                     | -                     |
| <b>Bleach Plant Process Area</b> |                                   |  |                                  |   |                       |                       |
| BLP03 <sup>(2)</sup>             | BLPSV03                           | <b>F Bleach Line</b>   | 50 ODTP/hr                       | Scrubber  | BLPCD03               | Cl <sub>2</sub> , HCl |
|                                  |                                   | Washer Hoods   | -                                |   |                       |                       |
|                                  |                                   | Post O <sub>2</sub> Surge Tank   | -                                |   |                       |                       |
|                                  |                                   | D Tower  | -                                |   |                       |                       |
|                                  |                                   | D Tower Seal Tank  | -                                |   |                       |                       |
|                                  |                                   | DO Tower   | -                                |   |                       |                       |
|                                  |                                   | DO Tower Seal Tank   | -                                |   |                       |                       |
|                                  |                                   | Oxygen Gas Cooler  | -                                |   |                       |                       |
| BLP05                            | CRESV03A,<br>CRESV03B             | <b>F Bleach O<sub>2</sub> Delignification</b>                                      | 50 ODTP/hr                       | No. 6 Recovery Furnace  | CRE03                 | VOC, HAPs             |
|                                  |                                   | Pre-O <sub>2</sub> Blend Chest   | -                                |   |                       |                       |
|                                  |                                   | O <sub>2</sub> Reactor   | -                                |   |                       |                       |
|                                  |                                   | Pre-O <sub>2</sub> Pressate Tank   | -                                |   |                       |                       |
|                                  |                                   | O <sub>2</sub> -1 Pressate Tank  | -                                |   |                       |                       |
|                                  |                                   | O <sub>2</sub> -2 Pressate Tank  | -                                |   |                       |                       |
|                                  |                                   | O <sub>2</sub> Blow Tank   | -                                |   |                       |                       |

| Emission Unit ID                   | Stack ID                          | Emission Unit Description   | Size/Rated Capacity <sup>1</sup> | Pollution Control Device (PCD) Description                              | PCD ID                 | Pollutant Controlled      |
|------------------------------------|-----------------------------------|---|----------------------------------|---|------------------------|---------------------------|
|                                    |                                   | Pre O <sub>2</sub> O <sub>2</sub> -1 and O <sub>2</sub> -2 Presses                      | -                                |   |                        |                           |
|                                    |                                   | O <sub>2</sub> Interstage Chest   | -                                |   |                        |                           |
| BLP06                              | -                                 | <b>High Density Storage Tanks</b>   | 8,760 hr/yr                      | -   | -                      | -                         |
|                                    | BLPSV06                           | #4 Hi density chest (Bleached)  | -                                | -   | -                      | -                         |
|                                    | BLPSV06                           | #41 Hi density chest (Unbleached)   | -                                | No. 6 Recovery Furnace  | CRE03                  | VOC, HAPs                 |
|                                    | BLPSV06                           | #43 Hi density chest (Bleached)   | -                                | -   | -                      | -                         |
| BLP07                              | -                                 | <b>High Density Stock Chests</b>  | 8,760 hr/yr                      | -   | -                      | -                         |
|                                    | BLPSV07                           | #44 Hi density chest (Bleached)   | -                                | -   | -                      | -                         |
| BLP08                              | BLPSV08                           | <b>SVP Plant</b>  | 1.5 tons/hr                      | -   | -                      | -                         |
|                                    | -                                 | Scrubber Vent Pipe  | -                                | -   | -                      | -                         |
|                                    | -                                 | ClO <sub>2</sub> Generator Explosion Hatch Vent Pipe                                    | -                                | -   | -                      | -                         |
|                                    | -                                 | 2 Chlorine Dioxide Storage Tanks  | -                                | -   | -                      | -                         |
| BLP09                              | BLPSV09                           | <b>R3 Plant</b>   | 1.67 tons/hr                     | -   | -                      | -                         |
|                                    | -                                 | Scrubber Vent Pipe  | -                                | -   | -                      | -                         |
|                                    | -                                 | ClO <sub>2</sub> Generator Explosion Hatch Vent Pipe                                    | -                                | -   | -                      | -                         |
| BLP11                              | -                                 | <b>F Oxygen Delignification HVLC Gas System Venting</b>                                 | -                                | -   | -                      | -                         |
| BLP13                              | -                                 | <b>HVLC Gas Collection System Venting at No. 6 Recovery Furnace</b>                     | -                                | -   | -                      | -                         |
| BLP14 <sup>(2)</sup>               | CRESV03A,<br>CRESV03B,<br>CAUSV03 | <b>Bleach Plant HVLC Condensate Collection System Tanks</b>                             | -                                | No. 6 Recovery Furnace or<br>No. 4 Lime Kiln and<br>Condensate Stripper | CRE03, CAU03,<br>CRE16 | Methanol, VOC<br>and HAPs |
|                                    |                                   | D-Wash Condensate Tank  |                                  |   |                        |                           |
|                                    |                                   | Combined Condensate Tank  |                                  |   |                        |                           |
| BLP015                             | -                                 | <b>Methanol (MeOH) Tank (2009) (NSPS Kb)</b>  | 19,000 gallons                   | -   | -                      | -                         |
| <b>Pulp Machine Process Area</b>   |                                   |   |                                  |   |                        |                           |
| PRM04                              | PRMSV04                           | <b>No. 4 Fluff Pulp Machine</b>   | 45.0 tons/hr                     | -   | -                      | -                         |
|                                    | -                                 | Fourdrinier vents (2)   | -                                | -   | -                      | -                         |
| PRM11                              | PRMSV11                           | <b>Bleached Stock LD Storage</b>  | 8,760 hr/yr                      | -   | -                      | -                         |
| <b>Power House Process Area</b>    |                                   |   |                                  |   |                        |                           |
| PWR05                              | PWRSV03                           | <b>No. 9 Power Boiler with duct burner (1997)</b><br>(NOx Budget Unit ID 029) (NSPS GG) | 893 MMBTU/hr                     | Oxidation Catalyst/SCR  | PWRCD04/05             | CO, VOC/ NO <sub>x</sub>  |
| PWR12                              | -                                 | <b>LVHC System Venting</b>  | -                                | -   | -                      | -                         |
| <b>Wastewater Treatment System</b> |                                   |   |                                  |   |                        |                           |
| WWT01                              | WWTSV01                           | <b>Primary Clarification/Sludge Handling</b>  | 93 million gal/day               | -   | -                      | -                         |

| Emission Unit ID                  | Stack ID | Emission Unit Description  | Size/Rated Capacity <sup>1</sup>  | Pollution Control Device (PCD) Description | PCD ID | Pollutant Controlled |
|-----------------------------------|----------|--|-----------------------------------|--|--------|----------------------|
| WWT02                             | -        | <b>Aerated Stabilization Basin</b>   | 93 million gal/day                | -  | -      | -                    |
| WWT03                             | -        | <b>C Pond</b>  | 11 billion gallons (total volume) | -  | -      | -                    |
| <b>Miscellaneous Process Area</b> |          |  |                                   |  |        |                      |
| MIS01                             | -        | <b>Paved Roads</b>   | -                                 | -  | -      | -                    |
| MIS02                             | -        | <b>Unpaved roads</b>   | -                                 | -  | -      | -                    |
| MIS03                             | -        | <b>Refrigeration systems</b>   | -                                 | -  | -      | -                    |
| MIS10                             | -        | <b>Miscellaneous Liquid Storage Tank (NSPS Kb - Depending on content of tank)</b>              | 900,000 gallon                    | -  | -      | -                    |
| MIS11 <sup>(4)</sup>              | -        | <b>Emergency Generator - Main Gate – Caterpillar 3054, (2000) (MACT ZZZZ)</b>                  | 100 HP / 60 KW                    | -  | -      | -                    |
| MIS12 <sup>(4)</sup>              | -        | <b>Emergency Generator – Main Office - Caterpillar 3054 (2000) (MACT ZZZZ)</b>                 | 100 HP / 60 KW                    | -  | -      | -                    |
| MIS13 <sup>(4)</sup>              | -        | <b>Emergency Generator – High-ground Storm-water Pump, Caterpillar, (2000) (MACT ZZZZ)</b>     | 75 HP                             | -  | -      | -                    |
| MIS14 <sup>(4)</sup>              | -        | <b>Non-Emergency Backup Pump 4 LK Turning Gear – Hatz 3M41Z (2006) (NSPS IIII) (MACT ZZZZ)</b> | 22.5 HP                           | -  | -      | -                    |
| MIS15 <sup>(4)</sup>              | -        | <b>WTP Fire Water Pump – Detroit (2000) (MACT ZZZZ)</b>  | 170 HP                            | -  | -      | -                    |
| MIS16 <sup>(4)</sup>              | -        | <b>Back Gate Fire Water Pump 2 – Detroit (2000) (MACT ZZZZ)</b>                                | 170 HP                            | -  | -      | -                    |
| MIS17 <sup>(4)</sup>              | -        | <b>FRP Fire Water Pump – Caterpillar (2000) (MACT ZZZZ)</b>                                    | 270 HP                            | -  | -      | -                    |
| MIS18 <sup>(4)</sup>              | -        | <b>FRP-910 Fire Water Pump – Caterpillar 3208, (2000) (MACT ZZZZ)</b>                          | 270 HP                            | -  | -      | -                    |
| MIS19 <sup>(4)</sup>              | -        | <b>Back Gate Fire Water Pump #1 - (MACT ZZZZ)</b>  | 170 HP                            | -  | -      | -                    |

- (1) The Size/Rated capacity is provided for informational purposes only, and is not an applicable requirement.  
(2) Units are subject to the MACT Subpart S - 40 CFR Part 63, Subpart S  
(3) Units are subject to the MACT Subpart MM - 40 CFR Part 63, Subpart MM  
(4) Units are subject to the MACT Subpart ZZZZ - 40 CFR Part 63, Subpart ZZZZ

## V. EMISSION UNIT APPLICABLE REQUIREMENTS

### A. Section III - Definitions

Section III of the permit defines the various terms and acronyms used throughout the permit.

### B. Section IV - Site-Wide Requirements

Section IV of the permit is pulled directly from the Site Wide Emission Cap (SWEC) Federally Enforceable State Operating Permit (FESOP) dated March 31, 2006, and amended on April 3, 2012, which was derived from the State Variance (9VAC5-230).

The following Virginia Administrative Codes are the applicable requirements that apply to the entire facility:

|                   |   |
|-------------------|---|
| 9VAC5 Chapter 80  | Article 1: Federal Operating Permits for Stationary Sources |
| 9VAC5 Chapter 80  | Article 2: Permit Program Fees for Stationary Sources       |
| 9VAC5 Chapter 80  | Article 4: Insignificant Activities                         |
| 9VAC5 Chapter 80  | Article 5: State Operating Permits                          |
| 9VAC5 Chapter 140 | Part I: NO <sub>x</sub> Budget Trading Program              |
| 9VAC5 Chapter 230 | Variance for International Paper Franklin Paper Mill        |

### C. Section V - Unbleached Pulp Mill Process Area

There is a federal regulation applicable to this section of the plant:

40 CFR Part 63 Subpart S - National Emission Standards for Hazardous Air Pollutants for Source Category:  
Pulp and Paper Production (known as MACT I and MACT III)

The following Virginia Administrative Codes are other applicable requirements that apply to the source:

|  |
|--|
| 9VAC5 Chapter 40 Part I: Special Provisions                              |
| 9VAC5 Chapter 40 Article 13: Emission Standards for Pulp and Paper Mills |

#### Digesters

The digester is applicable to Chapter 40, Article 13 for TRS emissions and to 40 CFR 63 Subpart S; therefore, the applicable TRS emission limits have been placed in the permit (Condition 28). The emissions from the digester go to the LVHC (Low Volume High Concentration) Collection System (See Appendix B). The gases are collected and routed to either No. 6 Recovery Furnace or the No. 4 Lime Kiln. The LVHC system is a closed vent system. This system has emergency vents which are monitored by a computer system. The computer system is set up to sound an alarm when one of the vents releases to the atmosphere. The turpentine system and the chip bin emissions are also collected by the LVHC. Because all the emissions from the digester go into the LVHC, and are then incinerated in either No. 6 Recovery Furnace or the No. 4 Lime Kiln, it is highly unlikely that the 5 ppm limit for TRS will be exceeded. Therefore, no monitoring of this emission limit is required in the permit.

The collection of the condensates and the LVHC and HVLC (High Volume Low Concentration) gases to comply with the Pulp and Paper MACT will be demonstrated in accordance with the monitoring requirements in the MACT. These requirements are listed in the permit. (Conditions 40-49)

The facility has two different options available to meet the condensate collection requirements of the MACT (Condition 43). They can meet either the 65% collection efficiency option [40 CFR 63.446(c)(2)] or the collection option to obtain at least 11.1 lbs/ton HAP [40 CFR 63.446(c)(3)]. Both/either option(s) will be demonstrated on a daily basis through flows, mass balances and annual methanol testing. Most of the closed collection system and the closed vent system is monitored for leaks on a monthly basis as well as having annual testing for leaks. In August of 2014, the facility received approval from EPA, Region III to reduce the Leak Detection and Repair (LDAR) monitoring frequency for components subject to 40 CFR 63.453(m) that are part of the facility's closed-vent system or the condensate collection system that are considered inherently unsafe or

inaccessible. The collected condensates are routed to a stripper which removes at least 92% of the HAPs (or reduce concentrations to 10.2 pounds per oven dried tons of pulp). The facility has to prove this reduction by monitoring the wastewater feed rate, the steam feed rate and the process wastewater column feed temperature (See the Chemical Recovery Section). The LVHC Collection System is a CAM applicable system, therefore, Compliance Assurance Monitoring (CAM) conditions are included in the permit for this system. (Condition 50)

Semi-annual reports are required for excess emissions from the LVHC and the HVLC collection systems.

We have required 'once per permit term' testing for methanol (Condition 60) from the condensate streams listed in Condition 32 to be sure that the 65% collection efficiency (or 11.1 lbs/ODTP) limits required by MACT S is being met.

Opacity - Because most of the units/processes in this part of the plant are wet processes, performing a Method 9 is impractical, so there are no visible emission limits listed. One process that might have opacity is the chip conveyor which is an insignificant unit. One other unit is the K2 chip bin which is exhausted into the LVHC system to be incinerated, and therefore, there should not be any opacity to be observed.

The HVLC gases from the washers and deckers will be routed to the No. 6 Recovery Furnace for destruction and will be monitored in accordance with the Conditions 44-47.

#### **D. Section VI - Caustic Recovery Process Area**

There are two federal regulations that apply to this section of the plant:

- |                            |  |
|----------------------------|--|
| 40 CFR Part 60, Subpart Kb | Standards of Performance for Volatile Organic Liquid Storage Vessels   |
| 40 CFR Part 63, Subpart MM | National Emission Standards for Hazardous Air Pollutants for Chemical Recovery Combustion Sources at Kraft, Soda, Sulfite and Stand-Alone Semi chemical Pulp Mills |

The following Virginia Administrative Codes are other applicable requirements that apply to the source:

- 9VAC5 Chapter 40 Part I: Special Provisions
- 9VAC5 Chapter 40 Article 13: Emission Standards for Pulp and Paper Mills

#### **Lime Kiln**

The Lime Kiln is subject to emission standards from 9VAC5-40-1690 and 40 CFR 63 Subpart MM. The particulate standard of 9VAC5-40-1690 for the Lime Kiln is Condition 65. The TRS emission standard of 9VAC5-40-1690 is in Condition 67. From Subpart MM, the facility is using 40 CFR 63.862(a)(1)(ii) for a combined emission standard from multiple units.

Continuous monitoring of TRS is achieved by using a CEMS which records the TRS emissions from the Lime Kiln. Any exceedances must be reported quarterly because the CEMS is a direct compliance monitor (Condition 76). Compliance Assurance Monitoring (CAM) conditions for the Lime Kiln have been incorporated into this permit for compliance with 40 CFR Part 64 (Conditions 78-86). The Continuous Parametric Monitoring System (CPMS) of the Lime Kiln scrubber is installed to ensure the proper operation of the scrubber to prove compliance with the PM emission limit. Parameters monitored are: the differential pressure drop across the scrubber; and the scrubber liquid flow rate (Condition 75). There is no visible emission limit listed for the scrubber due to large amounts of steam being emitted making a Method 9 impractical.

Recordkeeping includes records of the production of lime, the daily operating periods of the lime kiln to show compliance with 9VAC5-40-1770C, parametric monitoring of the kiln scrubber, TRS CEMS data, calibration of the CEMS, and monitoring of the closed vent system and the condensate closed collection system. (Condition 58)

Reporting includes excess emission reports for the TRS CEMS and the parametric monitoring system for the kiln scrubber. (Condition 59)

### **Slakers**

The Slaker tank units (CAU-04, CAU-05) are subject to emission standards from 9VAC5-40-1690. The particulate emission standard is for all the Slaker tank units, combined, and can be found in Condition 66. At this time, the facility is only operating Slaker No. 6, but Slaker No. 5 is their backup unit.

The Slakers are subject to CAM and have parametric monitoring to prove compliance with the emission standards (Condition 79). The CAM plan is part of the monitoring section, however, only one Slaker has been tested, so the testing section requires that Slaker No. 5 have testing to determine parameter ranges once it is operated. By 40 CFR 64.4(e) the parametric testing must be performed within 180 days of startup of each Slaker unit.

There is no opacity condition for the slakers because this is a wet process, making a Method 9 impractical.

Recordkeeping and reporting requirements for this section of the mill include excess emission reports for the parametric monitoring of the scrubber. Specific requirements from Article 13, the FESOP and Subpart MM are included. (Condition 94-96)

Testing of the No. 5 Slaker remains in the permit so that once it starts operating the initial testing will be performed to determine the parameters of the CPMS. (Condition 98)

## **E. Section VII - Chemical Recovery Process Area**

There are four federal regulations applicable to this section of the plant:

|                            |  |
|----------------------------|--|
| 40 CFR Part 63 Subpart S   | National Emission Standards for Hazardous Air Pollutants for Source Category: Pulp and Paper Production  |
| 40 CFR Part 60, Subpart BB | Standards of Performance for Kraft Pulp Mills  |
| 40 CFR Part 60, Subpart Kb | Standards for Storage Vessels for Petroleum Liquids  |
| 40 CFR Part 63, Subpart MM | National Emission Standards for Hazardous Air Pollutants for Chemical Recovery Combustion Sources at Kraft, Soda, Sulfite and Stand-Alone Semi chemical Pulp Mills |

The following Virginia Administrative Codes are other applicable requirements that apply to the source:

- 9VAC5 Chapter 40 Part I: Special Provisions
- 9VAC5 Chapter 40 Article 13: Emission Standards for Pulp and Paper Mills
- 9VAC5 Chapter 50 Part I and Part II: Special Provisions and Emissions Standards

### **Recovery Furnace Unit**

9VAC5 Chapter 40, Article 13, has a PM and TRS emissions standard for the Recover Furnace. There is also a PM emission limit established by the MACT MM that the facility must meet. The furnace has an opacity limit from 9VAC5-40-1710 as well as from MACT MM (Condition 107).

The facility will prove compliance with the PM emission standard for the No. 6 Recovery Furnace by performing a stack test once per permit term. This unit is CAM applicable for PM; the CAM plan is in Condition 137. TRS emissions will be monitored by the CEMS on the No. 6 Recovery Furnace (Condition 120). Visible emissions from the Recovery Furnace will be monitored by a Continuous Opacity Monitoring System (COMS) (Condition 122-123).

Excess emission reports for the TRS CEMS must be submitted quarterly. (Condition 147)

### **Smelt Dissolving Tank**

9VAC5 Chapter 40, Article 13, has a PM and TRS emissions standard for the Smelt Dissolving Tank (Conditions 100 and 105). Subpart MM also has a standard for the Smelt Dissolving Tank (Condition 101).

The facility will prove compliance with the TRS emission standard for the Smelt Dissolving Tank by performing a stack test once per permit term to demonstrate compliance (Condition 153). The Subpart MM parametric monitoring (CPMS) will prove compliance with the PM standard for this unit. The unit is CAM applicable for PM, so a CAM plan is in Condition 138.

Visible emission evaluations are not necessary because this is wet scrubber process, making a Method 9 impractical.

### **Multiple-Effect Evaporators and Condensate Stripper System**

9VAC5 Chapter 40, Article 13, has a TRS emissions standard for the condensate stripper and the multiple effects evaporator (Conditions 103-104). The multiple effects evaporator and condensate stripper are the only units in this process area that are applicable to 40 CFR Part 60, Subpart BB. 40 CFR 63 Subpart S requires collection and incineration of the emissions from these units.

The emissions from the evaporators and the condensate stripper go to the LVHC collection system. The gases are collected and routed to either No. 6 Recovery Furnace or the No. 4 Lime Kiln where they are incinerated. The LVHC collection system is a closed system. This system has emergency vents, which are monitored by a computer system. The computer system is wired to sound an alarm when one of the vents releases to the atmosphere. Because all the emissions from the evaporators go into the LVHC, and are then incinerated in either No. 6 Recovery Furnace or the No. 4 Lime Kiln, it is highly unlikely that the TRS emission limits will be exceeded. Monitoring of the LVHC collection system is also part of Subpart S which requires monthly visible inspections and annual testing of the closed vent systems. (Conditions 127-131) The LVHC collection system is a CAM applicable emissions unit, so a CAM plan is in Condition 139 for the LVHC collection system.

Excess emission reports, quarterly CEMS reports and COMS reports, and LVHC reports are required to be submitted (Conditions 148-150).

### **Tanks**

There is one tank that by size might be 40 CFR Part 60, Subpart Kb applicable, but it is a process tank and therefore not applicable (see definition of storage vessel in Subpart Kb).

### **General**

Recordkeeping and reporting requirements for this section of the mill include MACT Subpart S requirements, MACT Subpart MM requirements, Subpart BB requirements, 9VAC5 Chapter 40, Article 13 requirements and those pulled from the FESOP. Excess emission reports and quarterly TRS reports are included. (Condition 147)

Testing requirements for this section of the plant include the once per permit term for (Conditions 152-154):

- PM testing of the Recovery Furnace,
- TRS testing of the Smelt Dissolving Tank, and
- MeOH testing of the condensate streams collected.



### **No. 9 Power Boiler**

This unit is subject to 9VAC5 Chapter 50 and 60 as well as to 40 CFR Part 60, Subpart GG. The duct burner is subject to 40 CFR Part 60, Subpart Db. The turbine is subject to MACT YYYY in the applicability section, but it is specifically exempted from the regulation in section 63.6090(b)(4). The Boiler MACT (Subpart DDDDD) is not applicable to turbines, so it is not applicable to this facility.

NO<sub>x</sub> is controlled by an SCR; CO and VOC are controlled by an oxidation catalyst.

This unit has a CEMS to monitor the emissions of NO<sub>x</sub> and CO (Conditions 191-192). No visible emission monitoring is in the permit, because the unit only fires natural gas and there should be no visible emissions when firing natural gas. Excess emissions reports have to be submitted quarterly because the CEMS are used for direct compliance (Condition 194).

Recordkeeping and reporting requirements include the requirements from 40 CFR Part 60, Subpart GG and the FESOP (Condition 193).

## **I. Section XI - Miscellaneous Processes**

**Internal Combustion Engines** - The facility has engines that are applicable to both 40 CFR Part 63, Subpart ZZZZ and Part 60, Subpart IIII. The units have been added the significant emissions unit list and applicable requirements from the MACT have been included (Conditions 197-198).

### **Tanks**

PWR-10: Old No. 910 Fuel Oil Storage Tank is Kb sized, but currently not applicable because it is used for storing process liquids that do not meet the applicability of 40 CFR Part 60, Subpart Kb. This unit is on the insignificant emissions unit list and no monitoring is associated with this tank. We have left a condition in the permit in the event the tank stores a Kb applicable liquid at some future time.

Recordkeeping and reporting requirements include requirements from 40 CFR Part 60, Subpart GG and the FESOP.

## VI. INSIGNIFICANT EMISSION UNITS

The insignificant emission units are listed in Section XII of the permit and below. 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 9VAC5-80-110.

| Emission Unit No. | Emission Unit Description                             | Citation         | Pollutant(s) Emitted (9VAC5-80-720 B) | Rated Capacity (9VAC5-80-720 C) |
|-------------------|---|------------------|---------------------------------------|---------------------------------|
| WDY03             | Log unloading   | 9 VAC 5-80-720 B | PM-10                                 |                                 |
| WDY04             | Log pile  | 9 VAC 5-80-720 B | PM-10                                 |                                 |
| WDY05             | Log loading- log pile to slasher                      | 9 VAC 5-80-720 B | PM-10                                 |                                 |
| WDY07             | Short log transport- slasher/debarker/chipper         | 9 VAC 5-80-720 B | PM-10                                 |                                 |
| WDY09             | Chip transport - chippers to pile                     | 9 VAC 5-80-720 B | PM-10                                 |                                 |
| WDY10             | Chip transport - purchased chips and saw dust to pile | 9 VAC 5-80-720 B | PM-10                                 |                                 |
| WDY12             | Chip piles  | 9 VAC 5-80-720 B | PM-10                                 |                                 |
| WDY13             | Chip loading- trucks to chip pit                      | 9 VAC 5-80-720 B | PM-10                                 |                                 |
| WDY15             | Chip reclaiming - chip pile screening/rechipping      | 9 VAC 5-80-720 B | PM-10                                 |                                 |
| WDY17             | Chip transport - screens to silos                     | 9 VAC 5-80-720 B | PM-10                                 |                                 |
| WDY19             | Chip transport - silos to digester                    | 9 VAC 5-80-720 B | PM-10                                 |                                 |
| UPM18             | #5 Low Density Storage Tank                           | 9 VAC 5-80-720 B | PM-10                                 |                                 |
| UPM22             | K1 Chip cyclone                                       | 9 VAC 5-80-720 B | PM-10                                 |                                 |
| UPM24             | 310 Chip conveyor                                     | 9 VAC 5-80-720 B | PM-10                                 |                                 |
| CRE14             | Soap storage  | 9 VAC 5-80-720 B | TRS, VOC                              |                                 |
| PRM12             | Lube oil storage tank                                 | 9 VAC 5-80-720 B | VOC                                   |                                 |
| PWR09             | Lube oil systems                                      | 9 VAC 5-80-720 B | VOC                                   |                                 |
| PWR13             | Remote Wood Storage and Handling                      | 9 VAC 5-80-720 B | PM-10                                 |                                 |
| WWT04             | pH adjustment and TRS control                         | 9 VAC 5-80-720 B | H <sub>2</sub> S, TRS                 | 0.92 x 10 <sup>6</sup> gpd      |
| MIS05             | Maintenance parts washer                              | 9 VAC 5-80-720 B | VOC                                   |                                 |
| MIS06             | Gasoline storage tank                                 | 9 VAC 5-80-720 B | VOC                                   |                                 |
| MIS07             | Log Storage Yard                                      | 9 VAC 5-80-720 B | PM-10                                 |                                 |
| MIS20             | Diesel Fuel Storage tank                              | 9 VAC 5-80-720 B | VOC                                   |                                 |

## VII. INAPPLICABLE REQUIREMENTS

Inapplicable requirements are listed in Section XIII of the permit and below.

The startup, shut down, and malfunction opacity exclusion listed in 9VAC5-40-20 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 9VAC5-40-20 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."

| Citation                           | Title of Citation  | Description of Non Applicability                                      |
|------------------------------------|--|---|
| 9 VAC 5 Chapter 40 Article 15      | Coal preparations  | Mill does not perform any of the applicable coal prep activities      |
| 9 VAC 5 Chapter 40 Article 31      | Paper and Fabric Coating Application Systems   | This facility is not in a VOC control area specified by this article. |
| 9 VAC 5 Chapter 40 Article 40      | Open Burning   | The facility does not conduct open burning.                           |
| 9 VAC 5 Chapter 40 Article 43      | Municipal Solid Waste Landfills  | The mill landfills do not qualify as municipal landfills.             |
| 9 VAC 5 Chapter 40 Article 47      | Solvent Cleaning   | This article only applies to Northern Virginia VOC control area.      |
| 9 VAC 5 Chapter 40 Article 51      | Case-by-Case RACT Determinations   | The facility is not in a control area specified by this article       |
| 9 VAC 5 Chapter 80 Article 3       | Federal Operating Permits for Acid Rain Sources  | Not an acid rain source   |
| 9 VAC 5 Chapter 140 Articles 11-19 | NO <sub>x</sub> Annual Trading Program   | The facility does not produce electricity for sale.                   |
| 9 VAC 5 Chapter 140 Articles 21-29 | NO <sub>x</sub> Ozone Season Trading Program   | The facility does not produce electricity for sale.                   |
| 9 VAC 5 Chapter 140 Articles 31-39 | SO <sub>2</sub> Annual Trading Program   | The facility does not produce electricity for sale.                   |
| 40 CFR 60 Subpart D                | Fossil-Fuel-Fired Steam Generators For Which Construction Is Commenced After August 17, 1971         | No emission units at the facility applicable to this regulation       |
| 40 CFR 60 Subpart Da               | Electric Utility Steam Generating Units For Which Construction Is Commenced After September 18, 1978 | No emission units at the facility applicable to this regulation       |

| Citation               | Title of Citation  | Description of Non Applicability   |
|------------------------|--|--|
| 40 CFR 60 Subpart Dc   | Small Industrial-Commercial-Institutional Steam Generating Units   | No emission units at the facility applicable to this regulation  |
| 40 CFR 60 Subpart E    | Incinerators   | The boilers and furnaces do not combust solid waste as defined by 40 CFR 60.51(b)  |
| 40 CFR 60 Subpart K    | Volatile Organic Liquid Storage Vessels for Which Construction, Reconstruction, or Modification Commenced After June 11, 1973, And Prior To May 19, 1978 | There are no storage vessels on site applicable to this regulation   |
| 40 CFR 60 Subpart Ka   | Volatile Organic Liquid Storage Vessels for Which Construction, Reconstruction, or Modification Commenced After May 18, 1978, And Prior To July 23, 1984 | There are no storage vessels on site applicable to this regulation.  |
| 40 CFR 60 Subpart O    | Sewage Treatment Plants  | This facility does not meet definition of applicability.   |
| 40 CFR 60 Subpart HH   | Lime Manufacturing Plants  | This facility is not subject to this subpart because lime manufacturing associated with pulp and paper making operations is specifically exempted by 40 CFR 60.340(b). |
| 40 CFR 60 Subpart KKKK | Stationary Combustion Turbines   | PWR05 was constructed before the applicability date and is applicable to subpart GG.   |
| 40 CFR 60 Subpart Y    | New Source Performance Standards for Coal Preparation Plants   | Mill does not perform any of the applicable coal prep activities   |
| 40 CFR 61 Subpart E    | Mercury  | This facility does not dry wastewater treatment sludge by direct contact with combustion gases.  |
| 40 CFR 61 Subpart I    | Radionuclide Emissions From Facilities Licensed By The Nuclear Regulatory Commission And Federal Facilities Not Covered By Subpart H.                    | All radionuclides at source are in sealed sources.   |
| 40 CFR 61 Subpart J    | Equipment Leaks (Fugitive Emission Source) Of Benzene  | Equipment at the mill is not in contact with material containing benzene greater than or equal to 10% by weight.   |
| 40 CFR 61 Subpart V    | Equipment Leaks (Fugitive Emission Source)   | Equipment at the mill is not in contact with material containing benzene or vinyl chloride greater than or equal to 10% by weight.                                     |
| 40 CFR 63 Subpart Q    | Industrial Process Cooling Towers  | Facility does not use Chromium containing compounds in its cooling towers  |
| 40 CFR 63 Subpart T    | Degreasing Organic Cleaners (Halogenated Solvent Cleaning)   | Facility does not use any of the specified compounds in its solvent baths.   |

| Citation                 | Title of Citation  | Description of Non Applicability  |
|--------------------------|--|---|
| 40 CFR 63 Subpart TT     | Equipment Leaks - Control Level 1                                    | No applicable MACT references this subpart.   |
| 40 CFR 63 Subpart UU     | Equipment Leaks - Control Level 2                                    | No applicable MACT references this subpart.   |
| 40 CFR 63 Subpart JJJJ   | Paper and Other Web Coatings (paper, plastic, film, foil, etc.)      | Coating materials are not applied to the mill's product   |
| 40 CFR 63 Subpart YYYY   | National Emission Standards for Stationary Combustion Turbines       | This turbine is considered an existing unit and is specifically exempted in Section 63.6090(b)(4).  |
| 40 CFR 63 Subpart AAAAA  | Lime Manufacturing   | Facility is specifically exempted from this subpart by 40 CFR 63.7081(a).                           |
| 40 CFR 63 Subpart GGGGGG | Primary Nonferrous Metals Area Sources - Zinc, Cadmium and Beryllium | Facility is not a primary metal production facility.  |
| 40 CFR 72                | Permits Regulation   | Applies only to affected units under the federal acid rain control permit program                   |
| 40 CFR 73                | Sulfur Dioxide Allowance Systems                                     | Only applies to electric utility sources in the federal acid rain control program                   |
| 40 CFR 74                | Sulfur Dioxide Opt-Ins   | Only applies to industrial sources that have chosen to become part of the federal acid rain program |
| 40 CFR 76                | Acid Rain Nitrogen Oxides Emission Reduction Program                 | Only applies to sources in the federal acid rain control program                                    |

### VIII. STREAMLINED REQUIREMENTS

Condition VIIC.1.h. of the FESOP has been streamlined out because all of the requirements to meet Subpart GG are included in the permit.

## IX. GENERAL CONDITIONS

The permit contains general conditions required by 40 CFR Part 70 and 9VAC5-80-110 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

1. Permit Expiration (Conditions 203-208)  
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”.
2. Failure/Malfunction Reporting (Conditions 215-217)  
Section 9VAC5-20-180 requires malfunction and excess emission reporting within four hours of discovery. Section 9VAC5-80-250 of the Title V regulations also requires malfunction reporting; however, reporting is required within two days. Section 9VAC5-20-180 is from the general regulations. All affected facilities are subject to section 9VAC5-20-180 including Title V facilities. Section 9VAC5-80-250 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 9VAC5-20-180 and 9VAC5-80-250. The report must be made within four daytime business hours of discovery of the malfunction.
3. Permit Modification (Condition 221)  
This general condition cites the sections that follow:  
9VAC5-80-50. Applicability, Federal Operating Permit For Stationary Sources  
9VAC5-80-190. Changes to Permits.  
9VAC5-80-260. Enforcement.  
9VAC5-80-1100. Applicability, Permits For New and Modified Stationary Sources  
9VAC5-80-1790. Applicability, Permits For Major Stationary Sources and Modifications Located in Prevention of Significant Deterioration Areas  
9VAC5-80-2000. Applicability, Permits for Major Stationary Sources and Major Modifications Locating in Nonattainment Areas
4. Malfunction as an Affirmative Defense (Conditions 235-238)  
The regulations contain two reporting requirements for malfunctions that coincide. The reporting requirements are listed in sections 9VAC5-80-250 and 9VAC5-20-180. The malfunction requirements are listed in General Condition U and General Condition F. For further explanation see the comments on general condition F.
5. Asbestos Requirements (Condition 242)  
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. CAIR/CSAPR**

The Cross State Air Pollution Rule (CSAPR) was promulgated on July 6, 2011. This rule was stayed by the D.C. Circuit court on December 15, 2011, leaving the CAIR regulation in effect until the legal issues are resolved. On April 29, 2014, the U. S. Supreme Court reversed the D.C. Circuit court opinion vacating the CSAPR. On June 26, 2014, the U.S. government filed a motion with the U.S. Court of Appeals for the D.C. Circuit to lift the stay of CSAPR. On October 23, 2014, the U.S. Court of Appeals for the D.C. Circuit ordered that EPA's motion to lift the stay be granted. As of this writing, CAIR is still in effect, but may soon be replaced by CSAPR. The applicable requirement to remain in compliance with CAIR has been left in the permit at this time. (Condition 246)

## **XI. STATE ONLY APPLICABLE REQUIREMENTS**

The permit includes the following state only applicable requirements:

- 9VAC5-40-140 Existing Source Standard for Odor
- 9VAC5-50-220 Existing Source Standard for Toxic Pollutants
- 9VAC5-50-140 New and Modified Source Standard for Odor
- 9VAC5-50-320 New and Modified Source Standard for Toxic Pollutants

## **XII. COMPLIANCE PLAN**

The facility is not under a compliance plan at this time.

## **XIII. CONFIDENTIAL INFORMATION**

The source has not identified any information as confidential. All portions of the application and permit are suitable for public review.

## **XIV. PUBLIC PARTICIPATION**

The proposed permit was placed on public notice in the Tidewater News newspaper from **Sunday, December 7, 2014 through Tuesday, January 6, 2015.**