

#OP-10-008  
DEC#NS94-0008  
Operating Permit Expiration Date: May 13, 2016

State of Vermont  
Agency of Natural Resources  
Department of Environmental Conservation



Air Pollution Control Division  
Waterbury, Vermont

**TITLE V**  
**AIR POLLUTION CONTROL PERMIT**  
**TO OPERATE**

Date Permit Issued: May 13, 2011

**Owner/Operator:** Putney Paper Company, Inc.  
P.O. Box 226  
Putney, Vermont 05346

**Source:** Paper Products Manufacturing Facility  
Putney Paper Company, Inc.  
U.S. Route 5 and Mill Street  
Putney, Vermont 05346

## FINDINGS OF FACT

### (A) FACILITY DESCRIPTION

Putney Paper Company, Inc. (hereinafter "Putney Paper" and also referred to herein as "Owner/Operator") owns and operates a tissue paper manufacturing facility off U.S. Route 5 and Mill Street in the town of Putney, Vermont (also referred to herein as "Facility"). The Facility is listed under the Standard Industrial Classification ("SIC") Codes - 2621 (Paper Mills) and 2627 (Sanitary Paper Products). The regulated sources of air contaminant emissions at the Facility are the paper making processes and the central heating plant boilers, as well as the diesel powered fire pump. The boilers include: two (2) existing No. 6 fuel oil-fired boilers manufactured by Cleaver Brooks and rated at 25 million British Thermal Units per hour (MMBTU/hr) each of heat input.

<b>Equipment Specifications</b>				
DESCRIPTION AND MODEL NUMBER	SIZE OR CAPACITY (MAX. ALLOWED)	FUEL TYPE(S) OR PROCESS INPUT	DATE INSTALLED	STACK HEIGHT (FT Above Grade)
Boiler #1 Cleaver Brooks Model 655-600	25 MMBTU/hr <sup>1</sup> 600 hp <sup>2</sup>	No. 6 Fuel Oil	1967	60
Boiler #2 Cleaver Brooks Model 655-600	25 MMBTU/hr 600 hp	No. 6 Fuel Oil	Before 7/1/1979	60

<sup>1</sup> MMBtu/hr - Million British Thermal Units per hour maximum rated heat input.

<sup>2</sup> hp - horsepower rated output as specified by the manufacturer.

### (B) FACILITY CLASSIFICATION

The Facility is classified as a source of air contaminants pursuant to Title 10 of the *Vermont Statutes Annotated* ("10 VSA") §555 and §5-401 of the *Vermont Air Pollution Control Regulations* (hereinafter "*Regulations*"). In addition, §5-101 of the *Regulations* defines a *stationary source* as any structure(s), equipment, installation(s), or operation(s), or combination thereof, which emit or may emit any air contaminant, which is located on one or more contiguous or adjacent properties and which is owned or operated by the same person or persons under common control. Based on this definition, all of the equipment, operations, and structures at the Facility are grouped together by the Agency of Natural Resources, Department of Environmental Conservation, Air Pollution Control Division (hereinafter "*Agency*") as one stationary air contaminant source for purposes of review under the *Regulations*.

### (C) PRIOR AGENCY ACTIONS/APPROVALS

The Facility has been issued the following "Permit to Operate" approvals pursuant to 10 VSA §556a and Subchapter X of the *Regulations*.

Prior Agency Permit Approvals and Actions	
Date of Action	Description of Agency Approval/Action
April 19, 2006	#OP-95-066 – Initial Agency "Permit to Operate" approval for Facility.

## (D) FACILITY PERMIT APPLICABILITY

As noted above, the Facility is classified as a source of air contaminants under §5-401 of the *Regulations*.

Pursuant to 10 VSA §556a and Subchapter X of the *Regulations* a Permit to Operate is required for any air contaminant source with allowable emissions of all air contaminants combined of ten (10) tons per year ("tpy") or more or that is subject to a standard, limitation or other requirement under §111 and/or §112 of the Clean Air Act.

The Facility currently operates under a Permit to Operate issued on April 19, 2006. The allowable emissions from the Facility are estimated to be greater than ten (10) tpy and emissions of sulfur dioxide (SO<sub>2</sub>), are estimated to be in excess of the one-hundred (100) tpy threshold for applicability to Title V of the federal Clean Air Act. Therefore, pursuant to §§5-1002, 5-1003, and 5-1005 of the *Regulations* the Facility is classified as a "Title V Subject Source". In accordance with §5-1009 of the *Regulations*, the agency is issuing the Permit to Operate herein as a renewal of the previous Permit to Operate for the Facility and the Permit herein supersedes all prior Permits for the Facility.

The allowable emissions for the Facility are summarized below:

Future Allowable Air Contaminant Emissions (tons/year) <sup>1</sup>						
PM/PM <sub>10</sub>	SO <sub>2</sub>	NO <sub>x</sub>	CO	VOCs	Total Criteria	HAPs <sup>2</sup>
55	361	84	6	<50	>10	<10/25

<sup>1</sup> PM/PM<sub>10</sub> - particulate matter and particulate matter of 10 micrometers in size or smaller; SO<sub>2</sub> - sulfur dioxide; NO<sub>x</sub> - oxides of nitrogen measured as NO<sub>2</sub> equivalent; CO - carbon monoxide; VOCs - volatile organic compounds; HAPs - hazardous air pollutants as defined in §112 of the federal Clean Air Act.

<sup>2</sup> Emissions of individual HAPs each < 10 tpy and emissions of total HAPs combined <25 tpy. Actual total combined HAPs estimated at <1 tpy.

## (E) REVIEW FOR THE PERMIT TO CONSTRUCT

## (a) New Source Review Designation

The Permittee has not proposed any modifications to the Facility in conjunction with the review for this Permit to Operate and therefore is not subject to review under the New Source Review requirements in §5-501 or §5-502 of the *Regulations* at this time.

(b) Most Stringent Emission Rate

Pursuant to §5-502 of the *Regulations*, the owner/operator of each new major stationary source or major modification must apply control technology adequate to achieve the Most Stringent Emission Rate ("MSER") with respect to those air contaminants for which there would be a major or significant actual emissions increase, respectively, but only for those currently proposed physical or operational changes which would contribute to the increased emissions.

The Permittee has not proposed any modifications to the Facility in conjunction with the review for this Permit to Operate and therefore is not subject to review under the MSER requirements in §5-502 of the *Regulations* at this time. In addition, there have been no prior MSER evaluations conducted for any of the previous modifications to the Facility.

(c) Ambient Air Quality Impact Evaluation

An ambient air quality impact evaluation is performed to demonstrate whether or not a proposed project will cause or contribute to violations of the ambient air quality standards and/or significantly deteriorate existing air quality.

The Permittee has not proposed any modifications to the Facility in conjunction with the review for this Permit to Operate and therefore is not subject to an air quality impact analysis under §5-501 of the *Regulations* at this time. In addition, there have been no prior ambient air quality impact evaluations conducted for any of the previous modifications to the Facility.

(F) REVIEW FOR THE PERMIT TO OPERATE

(a) Applicable Requirements

The operations at the Facility are subject to the following state and federal laws and regulations, the requirements of which are embodied in the conditions of this Permit.

(i) *Vermont Air Pollution Control Regulations:*

<b>Applicable Requirements from <i>Vermont Air Pollution Control Regulations</i></b>
Section 5-201- Prohibition of Open burning
Section 5-211(1) - Prohibition of Visible Air Contaminants, Installations Constructed Prior to April 30, 1970
Section 5-211(2) - Prohibition of Visible Air Contaminants, Installations Constructed Subsequent to April 30, 1970
Section 5-221(1) - Prohibition of Potentially Polluting Materials in Fuel, Sulfur Limitation in Fuel

<b>Applicable Requirements from Vermont Air Pollution Control Regulations</b>
Section 5-231(1) - Prohibition of Particulate Matter; Industrial Process Emissions
Section 5-231(3) - Prohibition of Particulate Matter; Combustion Contaminants
Section 5-231(4) - Prohibition of Particulate Matter; Fugitive Particulate Matter
Section 5-241 – Prohibition of Nuisance and Odor
Section 5-253.14 – Control of Volatile Organic Compounds from Solvent Metal Cleaning
Section 5-403 – Circumvention
Subchapter VIII – Registration of Air Contaminant Sources
Subchapter X – Operating Permits

(ii) Reasonably Available Control Technology - §5-1010 of the *Regulations*

Pursuant to 10 VSA §556a(d) and §5-1010 of the *Regulations* the Agency may establish and include within any Permit to Operate emission control requirements based on Reasonably Available Control Technology ("RACT"). Based on the Facility's existing levels of emissions and emission controls, the Agency has not imposed any further requirements on this Facility under this authority at this time.

(iii) Existing Air Pollution Control Permit to Construct and/or Operate

The Facility currently operates under the confines of a Permit to Operate issued on April 19, 2006 (#OP-95-066). The conditions within that existing permit are considered applicable requirements pursuant to §5-1002 of the *Regulations*. The requirements of that permit which are not being modified herein are incorporated into this new combined Permit to Operate (#OP-10-008).

(iv) Federal Requirements:

<b>Applicable Requirements from Federal Regulations and the Clean Air Act</b>
40 CFR Part 63, Subpart DDDDD - National Emission Standards for Hazardous Air Pollutants for Industrial, Commercial, Institutional Boilers and Process Heaters. Applicable to boilers and process heaters, other than existing gas or liquid fired units and small (<10 MMBTU) solid fuel fired units, that are located at a major source of HAPs.  <i>This Facility is not considered a major HAP source and therefore is not subject to this regulation.</i>

**Applicable Requirements from  
Federal Regulations and the Clean Air Act**

40 CFR Part 63, Subpart JJJJJ - National Emission Standards for Hazardous Air Pollutants for Industrial, Commercial and Institutional Boilers. This regulation will apply to new and existing fuel oil and solid fuel fired boilers located at area sources (major sources are subject to Subpart DDDDD). It does not apply to natural gas or propane fired boilers. The final rule is effective 3/21/2011. Boilers that commenced construction on or before June 4, 2010 are considered an existing source.

*The oil boilers are subject to this regulation.*

40 CFR Part 63, Subpart ZZZZ - National Emission Standards for Hazardous Air Pollutants for Reciprocating Internal Combustion Engines. Applies to new engines installed after June 12, 2006 at area sources of HAPs. Requires such engines to meet the emission standards of NSPS Subpart IIII and JJJJ, imposes ULSD fuel limitations, and imposes maintenance requirements. Separate provisions of ZZZZ also apply to existing engines installed prior to June 12, 2006.

*The fire pump's diesel engine is subject to this standard.*

Sections 502(b) and 114(a)(3) of the *Clean Air Act* require enhanced monitoring for major sources of air contaminants. The Facility is classified as a major source and is required to comply with any regulations promulgated by the U.S. EPA implementing these sections. On October 22, 1997, U.S. EPA published in the *Federal Register* new compliance assurance monitoring requirements implementing Section 502(b) of the *Clean Air Act*. Within the final regulations U.S. EPA provided specific criteria for applicability and an implementation schedule for the new compliance monitoring requirements.

*Based upon the criteria specified in regulation, 40 CFR Part 64, the Permittee is not subject to additional monitoring requirements for compliance assurance monitoring.*

(b) Non-Applicable Requirements

Pursuant to §5-1015(a)(14) of the *Regulations*, an owner or operator of a Facility may request a permit shield from specific state or federally enforceable regulations and standards which are not applicable to the source. The applicant has not requested such a permit shield in accordance with the requirements of §5-1015(a)(14) of the *Regulations*

(c) Enforceability

This section delineates which permit conditions are federally enforceable and which conditions are state only enforceable. All federal enforceable conditions are subject to federal citizen suit provisions. All conditions of this Permit are enforceable by both state and federal authorities.

(d) Compliance Certification

The Permittee is required by this Permit to certify compliance as part of its annual registration with the Agency pursuant to the requirements of Subchapter X of the *Regulations*. Additionally, this Permit requires the submission of semi-annual

reports of monitoring records used to demonstrate compliance with the limitations contained in this Permit.

(G) HAZARDOUS MOST STRINGENT EMISSION RATE

Pursuant to §5-261 of the *Regulations*, any stationary source whose current or proposed actual emission rate of a hazardous air contaminant ("HAC") is equal to or greater than the respective Action Level (found in Appendix C of the *Regulations*) shall achieve the Hazardous Most Stringent Emission Rate ("HMSEER") for the respective HAC.

Since fuel burning equipment which combusts only virgin liquid or gaseous fuel is not subject to §5-261, the Facility's combustion equipment will not have regulated emissions of any HAC in excess of an Action Level. In addition, the Facility's other processes are not expected to have regulated emissions of any HAC in excess of an Action Level. Therefore, the Facility is not subject to §5-261 of the *Regulations* at this time.

In the past, the Facility used sodium hypochlorite as a process chemical. Since the use of sodium hypochlorite as a process chemical in the papermaking process will produce chloroform as a byproduct, the previous permit included this statement:

If the Permittee proposes to continue the use of more than 500 gallons per year of sodium hypochlorite at the Facility, then within 180 days of the permit issuance, the Permittee shall conduct and submit to the Agency a Hazardous Most Stringent Emission Rate evaluation for the hazardous air contaminant chloroform resulting from the use of chlorinated oxidants/bleaching agents in their papermaking processes.

In 2006 the Facility stopped using sodium hypochlorite as a process chemical in their papermaking process. In the future, should the Permittee need to resume using sodium hypochlorite in the papermaking process in quantities exceeding 500 gallons per year, then Condition (16) of the permit requires them to first contact the Agency to review the proposed process change.

Based on the Agency's review of the Facility's application and the above Findings of Fact, the Agency concludes that the Facility, subject to the following Permit conditions, complies with all applicable state and federal air pollution control laws and regulations. Therefore, pursuant to 10 VSA §556a, as amended, the Agency hereby issues a Permit approving the Facility, as described in the above Findings of Fact, subject to the following:

## PERMIT CONDITIONS

### - Construction and Equipment Specifications -

- (1) The Permittee shall operate the Facility in accordance with the plans and specifications submitted to the Agency and in accordance with the conditions set forth herein, including the equipment specifications as listed in Findings of Fact (A). [10 V.S.A. §556a(d)]
- (2) **Stack heights:** The exhaust gases from the two (2) Cleaver Brooks No. 6 fuel oil-fired boilers vertically through a stack which extends a minimum of sixty (60) feet above the stack base grade elevation. The stack shall not be equipped with any device that may obstruct the upward discharge of the exhaust gases such as a fixed rain cap. [10 V.S.A. §556a(d)] [§5-406 of the *Regulations*]

### - Operational Limitations -

- (3) The annual fuel consumption in the two (2) Cleaver Brooks No. 6 oil-fired boilers shall not exceed a combined 2,300,000 gallons, based upon any rolling twelve (12) consecutive calendar month period. [10 V.S.A. §556a(d)]
- (4) The No. 6 fuel oil burned at the Facility shall not exceed a maximum sulfur content of 2.0 percent by weight. [§5-221(1) of the *Regulations*][Application for OP-95-066]
- (5) **Diesel Engines:** The fire pump diesel engine may only use No. 2 fuel oil, off-road diesel fuel, highway-grade diesel fuel, or lighter grade fuel oils with a maximum sulfur content not to exceed 0.5 percent by weight (5000 ppm) unless the Permittee obtains prior written approval from the Agency to use another type of fuel. [10 V.S.A. §556a(d)] [§§5-221(1)(a) and 5-1015(a)(1) of the *Regulations*]
- (6) **Engines:** The Permittee shall not install or operate a stationary reciprocating internal combustion engine, as defined in the *Regulations*, that is 450 bhp or greater unless the engine complies with §5-271 of the *Regulations*, as applicable. All engines, including emergency engines, installed on or after July 1, 2007 must comply with the applicable emission standards (Tier 2) of §5-271 immediately upon installation. Installation of any size engine, even those below 450 bhp, may still require approval from the Agency in the form of an amended permit prior to installation. Stationary reciprocating internal combustion engines include those used to power electric generator sets or to provide shaft power for other equipment such as compressors but does not include engines used to power motor vehicles. [§§5-271 and 5-501 of the *Regulations*]

- (7) Emergency Engines – Fire Pump: In accordance with the requirements of 40 *CFR* Part 60 Subpart ZZZZ, the Permittee shall implement the following operating and maintenance practices for each emergency diesel engine at the Facility:
- a. Operating Practices and Limitations – the Permittee:
    - i. must operate and maintain the stationary RICE according to the manufacturer's emission-related written instructions or develop their own maintenance plan which must provide to the extent practicable for the maintenance and operation of the engine in a manner consistent with good air pollution control practice for minimizing emissions [63.6625(e)]
    - ii. must install a non-resettable hour meter if one is not already installed [63.6625(f)]
    - iii. must minimize the engine's time spent at idle during startup and minimize the engine's startup time to a period needed for appropriate and safe loading of the engine, not to exceed 30 minutes [63.6625(h)]
    - iv. may operate the emergency stationary RICE for the purpose of maintenance checks and readiness testing, provided that the tests are recommended by Federal, State or local government, the manufacturer, the vendor, or the insurance company associated with the engine. Maintenance checks and readiness testing of such units is limited to 100 hours per year. [63.6640(f)(1)(ii)]
    - v. may operate the emergency engine for a maximum of 15 hours per year as part of a demand response program if the regional transmission organization or equivalent balancing authority and transmission operator has determined there are emergency conditions that could lead to a potential electrical blackout, such as unusually low frequency, equipment overload, capacity or energy deficiency, or unacceptable voltage level. The engine may not be operated for more than 30 minutes prior to the time when the emergency condition is expected to occur, and the engine operation must be terminated immediately after the facility is notified that the emergency condition is no longer imminent. The 15 hours per year of demand response operation are counted as part of the 50 hours of operation per year provided for non-emergency situations. [(63.6640(f)(1)(iii)]
  - b. Maintenance Practices (from Table 2d, item 4, of Subpart ZZZZ):
    - i. Change oil and filter every 500 hours of operation or annually, whichever comes first, or follow the oil analysis program in §63.6625(i);
    - ii. Inspect air cleaner every 1,000 hours of operation or annually, whichever comes first; and
    - iii. Inspect all hoses and belts every 500 hours of operation or annually, whichever comes first, and replace as necessary.
  - c. Implementation:
    - i. With the exception of Condition (7)(a)(iv) which is already in effect, the Permittee must comply with the rest of Condition (7) no later than May 3, 2013.

[10 V.S.A. §556a(d)] [40 *CFR* Part 60 Subpart ZZZZ]

- (8) In accordance with 40 *CFR* Part 63 Subpart JJJJJJ (National Emission Standards for Hazardous Air Pollutants: Industrial, Commercial and Institutional Boilers at area sources), the Permittee shall comply with the following applicable requirements for coal, oil and wood fired boilers as well as all other applicable requirements of this regulation:
- (a) Biennial tune-ups of the boiler(s) as required by 40 *CFR* §63.11223. For boilers installed prior to June 4, 2010 the first tune-up is required by March 21, 2012. Subsequent tune-ups must be completed no later than 25 months after the prior tune-up.
  - (b) A one-time energy assessment of the boilers as well as the rest of the Facility as required by 40 *CFR* §63.11201(b). This provision only applies to existing facilities with one or more boilers of 10 MMBtu/hr heat input or greater that were installed prior to June 4, 2010. The energy assessment must be completed by March 21, 2014.
  - (c) Notification, reporting and recordkeeping requirements as specified in §63.11225. This includes:
    - (i) §63.11225(a)(2): Initial Notification:
      - a. For boilers installed prior to June 4, 2010 the initial notification must be sent to the EPA no later than September 17, 2011.
    - (ii) §63.11225(a)(4): Notification of Compliance Status:
      - a. Notification of the initial tune-up of the boiler must be submitted no later than July 19, 2012 for boilers installed prior to June 4, 2010.
      - b. Notification of the completion of the energy assessment must be submitted no later than July 19, 2014
    - (iii) §63.11225(b): By March 1 of each year, prepare and submit an annual compliance certification report. For boilers only subject to a requirement to conduct biennial tune-up and not subject to emission limits or operating limits, the Permittee may prepare only a biennial compliance report. This should be included in the Annual Compliance Certification required by Condition (30) of this permit.
    - (iv) All records, reports and notifications that are required by this regulation shall be submitted to the Agency as well as the U.S. Environmental Protection Agency.

[40 *CFR* Part 63 Subpart JJJJJJ] [40 *CFR* Part 63]

- (9) Solvent Metal Cleaning: The Permittee shall operate the cold, solvent metal cleaning units (parts cleaners) in accordance with the following requirements and shall only use a solvent with a vapor pressure equal to or less than 0.3 pounds per square inch measured at 100°F, which includes but is not limited to the Safety-Kleen 105 hydrocarbon solvent. Prior to the Permittee using any solvent with a maximum true vapor pressure greater than 0.3 psi or using a solvent that is heated, the Permittee shall notify the Agency and comply with any additional applicable requirements of §5-253.14 of the *Regulations*.
- (a) Provide a permanent, legible, conspicuous label, summarizing the operating requirements;
  - (b) Store waste solvent in covered containers;

- (c) Close the cover whenever parts are not being handled in the cleaner;
- (d) Drain the cleaned parts until dripping ceases;
- (e) Supply a solvent spray, if used, that ensures a solid fluid stream at a pressure that does not exceed ten (10) pounds per square inch gauge;
- (f) Degrease only materials that are neither porous nor absorbent; and
- (g) Cease operation of the unit upon the detection of any visible solvent leak until such solvent leak is repaired.

[10 V.S.A. §556a(d)] [§5-253.14 of the Regulations]

- (10) **Open Burning:** Open burning is prohibited except as provided for in §5-202 of the *Regulations*. Prior to conducting open burning of any material, other than leaves, brush, or tree cuttings from normal grounds maintenance, the Permittee shall contact the Air Pollution Control Officer and obtain approval for such burning, if required. [§5-202 of the *Regulations*]

**-Emission Limitations -**

- (11) Emissions of particulate matter ("PM") from each of the No. 6 oil-fired boilers shall not exceed the following limits:

<b>Particulate Matter Emission Limitations</b>		
Unit	Emission Limitations	
	lbs/MMBTU	lbs/hour <sup>2</sup>
Boiler #1	0.32	8.0
Boiler #2	0.32	8.0

<sup>1</sup> lbs/MMBTU equals pounds of pollutant emitted per million British Thermal Units of heat input.

<sup>2</sup> lbs/hour equals pounds of pollutant emitted per hour.

Any emission testing conducted to demonstrate compliance with the above emission limit shall be performed in accordance with Title 40 *Code of Federal Regulations* Part 60, Appendix A, Reference Method 5 or an alternative method which has been published in Title 40 *Code of Federal Regulations*, provided the federally approved alternative method has been accepted in writing by the Agency before testing. [§§5-231(3) and 5-404 of the *Regulations*]

- (12) **Particulate Matter:** Emissions of particulate matter ("PM") from any fossil fuel burning device, except motorized vehicles, with a heat input rating of less than ten (10) million British Thermal Units per hour ("MMBTU/hr") shall not exceed 0.5 pounds per MMBTU.

Any emission testing conducted to demonstrate compliance with the above emission limit shall be performed in accordance with 40 *CFR* Part 60, Appendix A, Reference Method 5 and 202 or equivalent methods approved in writing by the Agency, or an alternative method which has been published in 40 *CFR*, provided the federally approved alternative method has been accepted in writing by the Agency before testing. [§§5-231(3)(a)(i) and 5-404 of the *Regulations*]

- (13) Visible Emissions [Facility Wide]: Emissions of visible air contaminants from any installation at the Facility, except where otherwise noted in this Permit, shall not exceed twenty (20) percent opacity for more than a period or periods aggregating six (6) minutes in any hour and at no time shall visible emissions exceed sixty (60) percent opacity.

Any emission testing conducted to demonstrate compliance with the above emission limits shall be performed in accordance with 40 *CFR* Part 51, Appendix M, Methods 203B and 203C, respectively, or equivalent methods approved in writing by the Agency. [§§5-211(2), 5-211(3) and 5-404 of the *Regulations*]

- (14) Visible Emissions [Boiler #1]: Emissions of visible air contaminants from the Cleaver Brooks No. 6 oil-fired boiler installed prior to April 30, 1970 shall not exceed forty (40) percent opacity for more than a period or periods aggregating six (6) minutes in any hour and at no time shall visible emissions exceed sixty (60) percent opacity.

Any emission testing conducted to demonstrate compliance with the above emission limits shall be performed in accordance with 40 *CFR* Part 51, Appendix M, Methods 203B and 203C, respectively, or equivalent methods approved in writing by the Agency. [§§5-211(1), 5-211(3) and 5-404 of the *Regulations*]

- (15) Hazardous Air Pollutants: Emission of federally regulated hazardous air pollutants (HAPs) from the Facility shall not equal or exceed ten (10) tons per year of any single HAP or twenty-five (25) tons per year of all HAPs combined per calendar year per year based on any rolling twelve (12) consecutive calendar month period. [40 *CFR* Part 63]

- (16) Hazardous Air Contaminants: Emissions of state hazardous air contaminants (HACs) from the applicable operations at the Facility shall not equal or exceed their respective Action Level (found in Appendix C of the *Regulations*) unless the Agency has reviewed and approved such HAC emission under §5-261(3) of the *Regulations*. [§5-261 of the *Regulations*]

- (17) Nuisance and Odor: The Permittee shall not discharge, cause, suffer, allow, or permit from any source whatsoever such quantities of air contaminants or other material which will cause injury, detriment, nuisance or annoyance to any considerable number of people or to the public or which endangers the comfort, repose, health or safety of any such persons or the public or which causes or has a natural tendency to cause injury or damage to business or property. The Permittee shall not discharge, cause, suffer, allow, or permit any emissions of objectionable odors beyond the property line of the premises. As directed in Condition (20) the Permittee shall develop and implement an Operation and Maintenance Plan to monitor potential sources of objectionable odors from the Facility, respond to odor complaints and identify corrective actions to reduce the emissions of said odors. [§5-241(1) and (2) of the *Regulations*]

**- Compliance Testing and Monitoring -**

- (18) Boiler combustion efficiency: The Permittee shall perform combustion efficiency testing of each of the boilers by measuring the concentrations of carbon dioxide ("CO<sub>2</sub>") and carbon monoxide ("CO") in the exhaust gases. Said testing shall be performed monthly

at a minimum. The Permittee shall perform said testing of the CO<sub>2</sub> and CO concentrations using methods which have been approved in writing in advance by the Agency. The CO<sub>2</sub> and CO concentrations may be on a wet or dry basis as long as they are both on the same basis. Any instruments and/or equipment used for said testing shall be calibrated and maintained in accordance with the manufacturer's recommendations. Each time testing of the boiler exhaust gas is conducted to determine the concentrations of CO<sub>2</sub> and CO, the Permittee shall calculate and record the combustion efficiency of the boiler using methods approved in writing in advance by the Agency. For the purposes of this Permit combustion efficiency shall be determined using the following equation:

$$CE (\%) = \frac{CO_2}{CO_2 + CO} \times 100$$

Where;

CE = Combustion efficiency,

CO<sub>2</sub> = % by volume of carbon dioxide in the flue gas, and

CO = % by volume of carbon monoxide in the flue gas.

[§§5-404(1), 5-405(1) and 5-1015(a)(3) and (4) of the *Regulations*]

- (19) Operation and Maintenance Plan [Boiler]: The Permittee shall have and implement an operation and maintenance plan (O&M Plan) for its two Cleaver Brooks boilers. The purpose of said plan shall be to ensure that the boilers remain in continuous compliance with the opacity and particulate emission limits contained in this Permit. The Permittee shall revise this plan at the Agency's request or on its own motion to reflect equipment or operational changes. Said operation and maintenance plan shall be present at the Facility always and shall be made available to representatives of the Agency upon request. The initial plan and any subsequent revisions thereof shall be subject to review and approval by the Agency. Failure to take reasonable steps, in accordance with said plan, to increase the combustion efficiency, once it has fallen below the trigger level, shall be considered credible evidence of possible exceedance of the opacity and particulate emission limits set forth in Conditions (11), 0 and (14) of this Permit. The operation and maintenance plan shall include, but not be limited to:
- (a) the procedures to be followed to increase combustion efficiency whenever the combustion efficiency is determined to be less than the trigger level;
  - (b) identification of the combustion efficiency trigger level, which will trigger action under said plan;
  - (c) descriptions of routine inspection and maintenance procedures; provisions for maintaining records of inspections and maintenance procedures, including both routine activities and actions taken in response to observations of low combustion efficiency; and
  - (d) provisions for calibration and maintenance of any testing instruments and/or equipment used to measure the concentrations of CO<sub>2</sub>/O<sub>2</sub> and CO in the boiler exhaust gases.

[10 V.S.A. §556a(d)]

- (20) Operation and Maintenance Plan [objectionable odors]: The Permittee shall develop and implement an O&M Plan to minimize potential emissions of objectionable odors from the Facility. The O&M plan shall include, but is not limited to the following:
- (a) Keeping daily records, in a log, of all readings of hydrogen sulfide (H<sub>2</sub>S) taken at predetermined locations in and around the plant, including the time and location of such readings.
  - (b) Provisions for calibration and maintenance of any testing instruments and/or equipment used to measure the concentrations of H<sub>2</sub>S.
  - (c) Record the quantity of the odor suppressant chemicals added to the wastewater.
  - (d) The Permittee shall establish a log for odor complaints that includes:
    - (i) Date, time and mode of the complaint;
    - (ii) If available, the name and address of the complainant;
    - (iii) Details of the nature of the odor complaint including the character, time and duration of the event and if known the wind direction at the time of the complaint;
    - (iv) The Permittee's response to the complaint and any findings, such as process upsets.
  - (e) The Permittee shall notify the Agency of any odor complaints within one business day of receiving the complaint.
  - (f) The Permittee shall establish procedures and corrective actions for responding to elevated levels of H<sub>2</sub>S or other objectionable odors from the Facility.

[10 V.S.A. §556a(d)] [§5-241(1) and (2) of the *Regulations*]

#### - Record Keeping and Reporting -

- (21) Records of Fuel Use: The Permittee shall maintain records of the total quantity of fuel oil consumed in the boilers, in gallons, each month. At the beginning of each month, the Permittee shall calculate the total quantity of fuel oil consumed in the boilers, in gallons, during the previous twelve (12) consecutive month period. [10 V.S.A. §556a(d) and §5-405(1) of the *Regulations*]
- (22) Records of Emergency Engines [fire pump]: In accordance with the requirements of 40 *CFR* Part 60 Subpart ZZZZ, the Permittee shall maintain the following records to show that the management practices required under Subpart ZZZZ are being met. These records must include, at a minimum, the following:
- a. Operating records:
    - i. Hours of emergency operation, and what classified the operation(s) as emergency;
    - ii. Hours of operation for maintenance and testing; and
    - iii. Emergency demand response operation:
      - 1. Hours of operation;
      - 2. Records of the notification of the emergency situation; and
      - 3. The start/stop times the engine was operated as part of demand response.

## b. Maintenance records:

- i. Oil and filter change dates, and/or any oil analysis information conducted for §63.6625(i);
- ii. Inspection and if applicable replacement dates for air cleaners, hoses, and belts; and
- iii. Records of other emission-related repairs and maintenance performed.
- iv. The Permittee must start maintaining these maintenance records no later than May 3, 2013.

[10 V.S.A. §556a(d)] [§5-402(1) of the *Regulations*] [40 CFR Part 60 Subpart ZZZZ §63.6655]

- (23) Records of Combustion Efficiency Testing: The Permittee shall maintain records of the results of the combustion efficiency testing conducted on the boilers. These records shall at least include the test date, identification of boiler tested, a measurement of the load on the boiler (such as fuel feed rate or steam production rate), the concentrations of oxygen, carbon monoxide and carbon dioxide in the exhaust gas as well as the calculated combustion efficiency. [10 V.S.A. §556a(d)] [§§5-405(1) and 5-1015(a)(3) and (4) of the *Regulations*]
- (24) Records of Fuel Oil Certifications: The Permittee Paper shall obtain from the fuel supplier, for each shipment of fuel oil received at the Facility, a certification or invoice stating the sulfur content of the fuel oil. The certification or invoice shall include the name of the fuel oil supplier, date of delivery, fuel type, quantity of fuel oil delivered, and a statement from the fuel oil supplier as to the sulfur content of the fuel oil in percent sulfur by weight. [§5-405(1) of the *Regulations*]
- (25) Records of all required compliance testing shall include the following:
- (a) the date, place, and time of sampling or measurements;
  - (b) the date analyses were performed;
  - (c) the company or entity that performed the analyses;
  - (d) the analytical techniques or methods used;
  - (e) the results of all such analyses; and
  - (f) the operating conditions existing at the time of sampling or measurement.
- [§§5-402(1), 5-405(1) and 5-1015(5) of the *Regulations*]
- (26) All records shall be retained for a minimum period of five (5) years from the date of record and shall be made available to the Agency upon request. [§§5-402(1), 5-405(1) and 5-1015(a)(7) of the *Regulations*]
- (27) The Permittee shall notify the Agency in writing within ten (10) days of any violation, of which it is aware, of any requirements of this Permit. This notification shall include, at a minimum, the cause for the violation and corrective action or preventative maintenance taken to correct the violation. [§§5-402(1) and 5-1015(a)(6) of the *Regulations*]
- (28) The Permittee shall notify the Agency in writing of any proposed physical or operational change at the Facility which may increase the emission rate of any air contaminant to the ambient air regardless of any concurrent emission reductions that may be achieved.

This notification requirement includes, but is not limited to, the proposed installation of any new equipment that is a source of air pollution, including the replacement of an existing permitted air pollution source. If the Agency determines that a permit amendment is required, a new application and the appropriate application fee shall be submitted. The permit amendment shall be obtained prior to commencing any such change except as may otherwise be allowed by the *Regulations*. [§§5-402(1) and 5-501 of the *Regulations*]

- (29) Semi-Annual Periodic Monitoring Reports: Within thirty (30) days after January 1<sup>st</sup> and July 1<sup>st</sup> of each year, the Permittee shall submit to the Agency a report, signed by a responsible official of the Facility, containing the following information regarding the preceding six (6) months:
- (a) a summary of the periodic combustion efficiency calculations required by Condition (17) of this Permit;
  - (b) a summary of the fuel usage records required by Condition (24) of this Permit; and
  - (c) a statement of the sulfur content of any and all fuel delivered to the Facility during the reporting period.

[§§5-402(1), 5-405(1) and 5-1015(a)(5) of the *Regulations*][40 CFR Part 70 §70.6(a)(3)(iii)(A)]

- (30) Annual Compliance Certification: By February 1st of each year, the Permittee shall submit to the Agency and the U.S. EPA an annual certification of compliance for the previous calendar year which ascertains and identifies the compliance status of the Facility with respect to all terms and conditions of this Permit, including but not limited to the following:
- (a) Identification of each term or condition of the permit that is the basis of the certification;
  - (b) The compliance status;
  - (c) Whether compliance was continuous or intermittent; and
  - (d) The methods used for determining the compliance status of the Facility over the reporting period.

[§114(a)(3) of the CAA] [§§5-402(1) and 5-1015(a)(11) of the *Regulations*]

- (31) Annual Registration: The Permittee shall calculate the quantity of emissions of air contaminants from the Facility annually. If the Facility emits more than five (5) tons of any and all air contaminants per year, the Permittee shall register the source with the Secretary of the Agency (hereinafter "Secretary"), and shall renew such registration annually. Each day of operating a source which is subject to registration without a valid, current registration shall constitute a separate violation and subject the Permittee to civil penalties. The registration process shall follow the procedures set forth in Subchapter VIII of the *Regulations*, including the payment of the annual registration fee on or before May 15 of each year. Annual registration forms submitted to the Agency shall contain a compliance certification statement in accordance with Condition (30) of this Permit. [Subchapter VIII §§5-802, 5-803, 5-807, 5-808 of the *Regulations*]

- (32) All records, reports, and notifications that are required to be submitted to the Agency by this Permit shall be submitted to:

Agency of Natural Resources  
Air Pollution Control Division  
103 South Main Street, Bldg 3 South  
Waterbury, Vermont 05671-0402.

[§5-402(1) of the *Regulations*]

- (33) All records, reports and notifications that are required to be submitted to the U.S. EPA by this Permit shall be submitted to:

Air Compliance Clerk  
U.S. EPA-New England  
5 Post Office Sq. Suite 100 (OES04-2)  
Boston, MA 02109-3912

[§5-402(1) of the *Regulations*]

**- Standard Permit Conditions -**

- (34) At all times, including periods of startup, shutdown, and malfunction, owners and operators shall, to the extent practicable, maintain and operate any affected facility including associated air pollution control equipment in a manner consistent with good air pollution control practice for minimizing emissions. Determination of whether acceptable operating and maintenance procedures are being used will be based on information available to the Agency which may include, but is not limited to, monitoring results, opacity observations, review of operating and maintenance procedures, and inspection of the source. [10 V.S.A. §556a(d)]
- (35) These Permit conditions may be suspended, terminated, modified, or revoked for cause and reissued upon the filing of a written request with the Secretary of the Agency (hereinafter "Secretary") or upon the Secretary's own motion. Any modification shall be granted only with the written approval of the Secretary. If the Secretary finds that modification is appropriate, only the conditions subject to modification shall be reopened. The filing of a request for modification, revocation and reissuance, or termination, or of a notification of planned changes or anticipated non-compliance does not stay any terms or conditions of this Permit. The Secretary may provide opportunity for public comment on any proposed modification of these conditions. If public comments are solicited, the Secretary shall follow the procedures set forth in 10 V.S.A. §556a, as amended. [10 V.S.A. §556a(g)] [§5-1008(a) and 5-1008(e) of the *Regulations*]
- (36) Cause for reopening, modification, termination and revocation of this Permit includes, but is not limited to:
- (a) Inclusion of additional applicable requirements pursuant to state or federal law;
  - (b) A determination that the permit contains a material mistake or that inaccurate information was used to establish emissions standards or other terms or conditions of the operating permit;
  - (c) A determination that the operating permit must be modified or revoked to ensure compliance with applicable requirements;
  - (d) A determination that the subject source has failed to comply with a permit condition;
  - (e) For Title V subject sources, a determination by U.S. EPA that cause exists to terminate, modify, revoke or reissue an operating permit;
  - (f) Those causes which are stated as grounds for refusal to issue, renew or modify an operating permit under §5-1008(a) of the *Regulations*; or
  - (g) If more than three (3) years remain in the permit term and the source becomes subject to a new applicable requirement.

[§5-1008(e)(4) of the *Regulations*]

- (37) The Permittee shall furnish to the Agency, within a reasonable time, any information that the Agency may request in writing to determine whether cause exists to modify, revoke, reissue, or terminate the Permit or to determine compliance with this Permit. Upon request, the Permittee shall also furnish to the Agency copies of records required to be kept by this Permit. [10 V.S.A. §556a(d)] [§5-402(1) of the *Regulations*] [40 CFR Part 70 §70.6(a)(6)(v)]

- (38) By acceptance of this Permit, the Permittee agrees to allow representatives of the State of Vermont access to the properties covered by the Permit, at reasonable times, to ascertain compliance with Vermont environmental and health statutes and regulations and with this Permit. The Permittee also agrees to give the Agency access to review and copy any records required to be maintained by this Permit, and to sample or monitor at reasonable times to ascertain compliance with this Permit. [10 V.S.A. §§556a(d) and 557] [§§5-402(1), 5-404, and 5-1015(a)(10) of the *Regulations*]
- (39) All data, plans, specifications, analyses and other information submitted or caused to be submitted to the Agency as part of the application for this Permit or an amendment to this Permit shall be complete and truthful and, for Title V permit applications, certified by a responsible official whose designation has been approved by the Secretary. Any such submission which is false or misleading shall be sufficient grounds for denial or revocation of this Permit, and may result in a fine and/or imprisonment under the authority of Vermont statutes. [10 V.S.A. §556a(d)] [§§5-505 and 5-1006(f) of the *Regulations*]
- (40) For the purpose of establishing whether or not a person has violated or is in violation of any condition of this Permit, nothing in this Permit shall preclude the use, including the exclusive use, of any credible evidence or information relevant to whether a source would have been in compliance with applicable requirements if the appropriate performance or compliance test or procedure had been performed. [10 V.S.A. §556a(d)]
- (41) Any permit noncompliance could constitute a violation of the federal Clean Air Act and is grounds for enforcement action; for permit termination, revocation and reissuance, or modification; or for denial of a permit renewal application. [10 V.S.A. §556a(d)] [§§5-1008(a) and 5-1008(e) of the *Regulations*]
- (42) It shall not be a defense for the Permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity to maintain compliance with the conditions of this Permit. [10 V.S.A. §556a(d)]
- (43) No person shall build, erect, install or use any article, machine, equipment or other contrivances, the use of which, without resulting in a reduction in the total release of air contaminants to the atmosphere, reduces or conceals an emission which otherwise would constitute a violation of these *Regulations*. [§5-403 of the *Regulations*]
- (44) The provisions of this Permit are severable. If any provision of this Permit, or its application to any person or circumstances is held invalid, illegal, or unenforceable by a court of competent jurisdiction, the invalidity shall not apply to any other portion of this Permit which can be given effect without the invalid provision or application thereof. [10 V.S.A. §556a(d)]
- (45) This Permit does not convey any property rights of any sort or any exclusive privilege, nor does it authorize any injury to private property or any invasion of personal rights. [10 V.S.A. §556a(d)]
- (46) All subsequent owners and/or operators of this Facility must request an amendment and transfer of this Permit prior to commencing any operations covered by this Permit. All

subsequent owners and/or operators shall submit to the Agency as part of the request for amendment all such information the Agency deems necessary to establish legal ownership and/or interest in the property and all such information the Agency deems necessary to ensure the new owners and/or operators will construct and operate the Facility in compliance with the *Regulations* and this Permit. The terms and conditions of this Permit shall remain in full force and effect after submittal of the request for amendment and until the issuance of an amended Permit or denial. Should the Secretary deny the request, the new owner and/or operator must take whatever action is necessary to comply with the denial. [10 V.S.A. §556a] [§§5-501, 5-1004, and 5-1013(a) of the *Regulations*]

- (47) Pursuant to 10 V.S.A. Chapter 220, any appeal of this decision must be filed with the clerk of the Environmental Court within 30 days of the date of the decision. The appellant must attach to the Notice of Appeal the entry fee of \$225.00 payable to the State of Vermont. The Notice of Appeal must specify the parties taking the appeal and the statutory provision under which each party claims party status; must designate the act or decision appealed from; must name the Environmental Court; and must be signed by the appellant or their attorney. In addition, the appeal must give the address or location and description of the property, project or facility with which the appeal is concerned and the name of the applicant or any permit involved in the appeal. The appellant must also serve a copy of the Notice of Appeal in accordance with the Rule 5(b)(4)(B) of the Vermont Rules for Environmental Court Proceedings. For further information, see the Vermont Rules for Environmental Court Proceedings, available on-line at [www.vermontjudiciary.org](http://www.vermontjudiciary.org). The address for the Environmental Court is 2418 Airport Road, Suite 1, Barre, Vermont 05641 (Tel. #802-828-1660).
- (48) This Operating Permit shall expire as indicated on cover page to this Permit. The Permittee shall submit to the Agency a complete application for renewal of the Operating Permit at least twelve (12) months before the expiration of the Operating Permit. If a timely and administratively complete application for an operating permit renewal is submitted to the Secretary, but the Secretary has failed to issue or deny such renewal before the end of the term of this Operating Permit, then the Permittee may continue to operate the subject source and all terms and conditions of this Operating Permit shall remain in effect until the Secretary has issued or denied the operating permit renewal. However, this Operating Permit shall automatically expire if, subsequent to the renewal application being determined or deemed administratively complete pursuant to §5-1006 of the *Regulations*, the Permittee fails to submit any additional information required by the Secretary as well as information pertaining to changes to the Facility within thirty (30) days or such other period as specified in writing by the Secretary. [§§5-1011 and 5-1012(a) of the *Regulations*] [§§5-1005(c) and 5-1012 of the *Regulations*]
- (49) The conditions of this Permit as set forth above supersede all conditions contained in all prior Permits issued by the Agency to the Permittee for this Facility. [10 V.S.A. §556a(d)]

The Agency's issuance of this Air Pollution Control Permit relies upon the data, judgment, and other information supplied by the Permittee. The Agency makes no assurances that the air contaminant source approved herein will meet performance objectives or vendor guarantees supplied to the source Permittee. It is the sole responsibility of the Permittee to operate the source in accordance with the conditions herein and with all applicable state and federal standards and regulations.

Dated this 13<sup>th</sup> day of May, 2011, in the town of Waterbury, county of Washington, state of Vermont.

Agency of Natural Resources

David K. Mears, Commissioner  
Department of Environmental Conservation

By: Richard A. Valentinetti  
Richard A. Valentinetti, Director  
Air Pollution Control Division

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