

#AOP-10-038

DEC# EJ96-0028

Operating Permit Expiration Date: November 12, 2019

State of Vermont
Agency of Natural Resources
Department of Environmental Conservation



Air Quality & Climate Division
Montpelier, Vermont

TITLE V
AIR POLLUTION CONTROL PERMIT
TO CONSTRUCT AND OPERATE

Date Permit Issued: November 12, 2014

Owner/Operator: **ROCK-TENN CONVERTING COMPANY**
504 Thrasher Street
Norcross, GA, 30071, USA

Source: **ROCK-TENN CONVERTING COMPANY**
Paperboard Manufacturing Facility
369 Mill Street
Sheldon Springs, Vermont 05485

FINDINGS OF FACT

(A) FACILITY DESCRIPTION

Rock-Tenn Converting Company (also referred to herein as "Permittee") owns and operates a paperboard manufacturing facility located off Mill Street in the town of Sheldon, Vermont (also referred to herein as "Facility"). The Facility consists of four natural gas/No.6 fuel oil boilers and two paperboard coating lines each with two coating and two drying units. The Permittee has proposed to install and operate a boiler flue gas heat recovery system on boilers 2, 3, and 4 while operating exclusively on natural gas. A new 100' fiberglass stack will be used to exhaust the lower temperature flue gas from boilers 2, 3, and 4 while the heat recovery system is in operation. The Permittee has also requested the flexibility to use alternative vinyl acetate-ethylene latex pigment binders due to potential availability limitations. Such alternative coatings would need to meet the same residual vinyl acetate and acetaldehyde restrictions as specified in this permit.

Upon issuance of this Permit, the approved operations at the Facility include the following air pollution related operations, equipment and emission control devices:

Equipment Specifications				
Equipment/Make/Model	Capacity/Size	Fuel Type	Stack Height ⁴	Date of Manufacture (Installation)
Wickes Boiler #1	89 MMBtu/hr ¹ 80 MMBtu/hr	Natural Gas No. 6 fuel oil	193'	1950
Cleaver-Brooks Boiler #2	28.6 MMBtu/hr 28.6 MMBtu/hr	Natural Gas No. 6 fuel oil (0.5%S)	167' (100' for FGHRS ²)	2008
B&W Boiler #3	33 MMBtu/hr 33 MMBtu/hr	Natural Gas No. 6 fuel oil		1950
B&W Boiler #4	31 MMBtu/hr 31 MMBtu/hr	Natural Gas No. 6 fuel oil		1950
Paperboard Coating Line #1				
Line Drier #1	5 MMBtu/hr	Natural Gas	40'	1969
Line Drier #1b	2.98 MMBtu/hr	Natural Gas		2001
Cylinder Exhaust #1			29'	
Paperboard Coating Line #2				
Line Drier #2	Steam supplied from Boilers		39'	1969
Line Drier #2b ³	3.264 MMBtu/hr	Natural Gas		1998
	1.67 MMBtu/hr	Natural Gas		2001
Cylinder Exhaust #2			39'	
Emergency Diesel Generator	16 MMBtu/hr	No. 2 fuel oil	32'	1950
Emergency Diesel Fire Pump	115 HP	No. 2 fuel oil	60'	1970

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

² FGHRS - flue gas heat recovery system utilized only when firing natural gas.

³ Both of the burners in line drier #2b are gas IR, and part of the coating drying section of paper machine #2.

⁴ Stack heights are referenced to the facility base elevation of 275' above MSL.

(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 (6)(a) [Fossil fuel-burning equipment] and (6)(c) [Stationary reciprocating internal combustion engines having a rating of 450 brake horsepower output or greater] 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 Quality & Climate 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 Construct" approvals pursuant to 10 VSA §556 and §§5-501 and/or 5-502 of the *Regulations* and 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
December 2, 1996	#AP-96-019 – Original Agency "Permit to Construct" approval to operate four natural gas/No. 6 fuel oil boilers. The existing boilers were used to supply heat to coating oven. The Facility removed the natural gas burners which contributed twenty million cubic feet of natural gas from paper coating lines 1 and 2. This was equivalent to 140,000 gallons of residual fuel oil.
June 13, 1997	#AP-96-019a – Administrative amendment to correct the PM limits as per 5-231 of the <i>Regulations</i> .
December 30, 1998	#AP-96-019b – Administrative amendment to install a new coating stage with infrared drying on existing paper machine #2.
July 16, 1999	#AOP-95-148 - Initial Agency "Permit to Operate" approval for the Facility to operate four boilers, one emergency generator, and paper coating lines 1 and 2.
March 8, 2001	#AOP-95-148a – Administrative amendment to modify two paper machines, including additional coating stage and drying.
November 17, 2005	#AOP-05-018 – In-house operating permit renewal application terminated upon filing of new construction and operating permit application AOP-05-018a below.

Prior Agency Permit Approvals and Actions	
Date of Action	Description of Agency Approval/Action
January 11, 2006	#AOP-05-018a –The fuel cap was increased from 1,020,000 gallons per year to the maximum of 1,024,800 gallons per year. Because the increase did not exceed the 161 tons per year SO2 emission limit, the modification was considered minor.
February 12, 2008	#AOP-05-018b - Approval to replace 1950 27 MMBtu/hr Wicks boiler #2 with a new 27.2 MMBtu/hr Cleaver-Brooks boiler, to be fired with natural gas and 0.5% sulfur No.6 fuel oil.
July 2, 2008	Permittee notified the Agency and the U.S. EPA in writing of the date construction of the Cleaver Brooks #2 boiler commenced.
September 10, 2008	Permittee notified the Agency and the U.S. EPA in writing of the actual date of initial start-up of the Cleaver Brooks #2 boiler

(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 §556 and §5-501 of the *Regulations* a Permit to Construct, or an amendment to any existing Permit to Construct, must be obtained before commencing the construction, installation, modification or operation of an air contaminant source. The installation of a flue-gas heat recovery is considered a modification to the Facility under the *Regulations* and consequently a Permit to Construct must be obtained.

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 otherwise subject to Title 40 *Code of Federal Regulations* ("40 CFR") Part 70. In addition, an amendment to any existing Permit to Operate is required prior to commencing any modifications to the Facility not previously allowed under the Permit to Operate. The proposed changes to the Facility are considered a modification under the *Regulations* and consequently an amendment to the Permit to Operate must be obtained consistent with the requirements of Subchapter X of the *Regulations*.

The flue-gas heat recovery project was subsequently approved under the provisions of the Clean Air Act §502(b)(10) and are now being incorporated into the Permit herein.

Allowable emissions from the Facility are estimated to be greater than ten (10) tpy combined and emissions of sulfur dioxide (SO₂) 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 10 VSA §556(e) the Agency has combined the Permit to Construct modification and the Permit to Operate modification and renewal for this Facility into one combined Permit to Construct and Operate. The allowable emissions for the Facility are summarized below:

Future Allowable Air Contaminant Emissions (tons/year) ¹						
PM/PM ₁₀	SO ₂	NO _x	CO	VOCs	Total Criteria	HAPs ²
17.7	162.3	<100	63.3	<50	>10	<10/25

¹ PM/PM₁₀ - particulate matter and particulate matter of 10 micrometers in size or smaller; SO₂ - sulfur dioxide; NO_x - oxides of nitrogen measured as NO₂ equivalent; CO - carbon monoxide; VOCs - volatile organic compounds; HAPs - hazardous air pollutants as defined in §112 of the federal Clean Air Act.

² Emissions of individual HAPs each < 10 tpy and emissions of total HAPs combined <25 tpy. Actual total combined HAPs are estimated to be approximately 1 tpy.

(E) REVIEW FOR THE PERMIT TO CONSTRUCT

(a) New Source Review Designation

The Facility, prior to the construction of the proposed modification, is designated as a major stationary source of air contaminants since it has allowable emissions of a single air contaminant of fifty (50) tons per year or greater. Consequently, any *modification* of the source that would result in a significant increase in emissions of any air contaminant, as defined in §5-101 of the *Regulations*, is designated as a major modification and is subject to review under §5-501 and §5-502 of the *Regulations*. The proposed project identified in Findings of Fact (A) above, together with all previous minor modifications constructed at the Facility since July 1, 1979, and which have not been previously reviewed under §5-502 of the *Regulations*, will not result in a significant increase in emissions. Consequently, the proposed modification is designated as a non-major modification and is not subject to the requirements of §5-502 of the *Regulations*.

(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 proposed project is designated as a non-major modification of a stationary source and therefore is not subject to review under the MSER requirements in §5-502 of the *Regulations*. 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 (AQIE) 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.

While installation of the flue gas heat recovery system will not result in an increase in mass emissions from the Facility, the lower exhaust temperature and lower stack height may result in increased ambient impacts due to decreased dispersion. Therefore the Permittee was required to conduct an AQIE to evaluate potential ambient impacts of NOx due to the flue gas heat recovery system. Since the flue gas heat recovery system will only be operated when boilers 2, 3, and 4 are operated on natural gas, particulate matter and sulfur oxide emissions were determined to not be of further concern. The AQIE satisfactorily demonstrated that ambient impacts of NOx would comply with the annual and new 1-hour National Ambient Air Quality Standards for NO2 at a stack height of 100' while burning exclusively natural gas and boiler 1 not in operation.

Prior Air Quality Impact Evaluations: The Facility was previously required to conduct an AQIE for modifications to the Facility in August of 1993 and 1995. The modification to the Facility included the operative requirement that no more than two (2) of its four (4) boilers operate on residual fuel oil concurrently due to potential short term SO2 impacts. The Facility may operate three (3) of its four (4) boilers on fuel oil concurrently if the Facility exclusively burns fuel oil having a sulfur content of 1% by weight or less in the three boilers or if the inoperative boiler is the larger Wickes boiler #1. The Facility was found to comply with all applicable ambient air quality standards and prevention of significant deterioration increments.

Ambient Air Quality Impact Evaluations		
Date of AQIE/ Permit #	Pollutant(s)	Summary of Results
August 1993	SO ₂	An AQIE was conducted for the pollutant SO ₂ , modeling from the Wickes Boiler #1 resulted in an increase in the stack height to 193 feet, and the operative limit that no more than two boilers will be operated on No. 6 fuel oil simultaneously. The modeling was necessary to resolve questions about the potential of air quality violations.
August 1995	SO ₂	An AQIE was conducted for the pollutants SO ₂ , NO _x , PM ₁₀ , and CO. The results concluded that in order for the Facility to meet short term ambient standards, the Facility may not run more than two of its boilers at any given time on No. 6 fuel oil, except three of four boilers may operate simultaneously if 1 percent sulfur by weight, or less, fuel oil is used.
September 2010 in support of #AOP-10-038	NO ₂	An AQIE was conducted for the pollutant NO ₂ due to the proposed installation of a flue gas heat recovery system on boilers 2, 3, and 4 while burning exclusively natural gas that would lower stack temperatures to 150 degrees F and lower the stack height to 100'. SO ₂ was not modeled since the system will only be used when firing natural gas. The AQIE demonstrated that both the annual and 1-hour NO ₂ NAAQS would be met.

(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:

Applicable Requirements from the Vermont Air Pollution Control Regulations
Section 5-201 – Prohibition of Open Burning
Section 5-211(1) - Prohibition of Visible Air Contaminants, Installations Constructed Prior to April 30, 1970. <i>Applicable units: Coating Dryer #1&#2, Wickes Boiler #1, B&W Boiler #3, #4, Diesel Emergency Generator.</i>
Section 5-211(2) - Prohibition of Visible Air Contaminants, Installations Constructed Subsequent to April 30, 1970. <i>Applicable unit: Cleaver-Brooks Boiler #2 and all other equipment installed after respective date.</i>
Section 5-221(1) - Prohibition of Potentially Polluting Materials in Fuel, Sulfur Limitation in Fuel.
Section 5-221(2) – Prohibition of Potentially Polluting Materials in Fuel, Waste Oil.
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 5-253.10 - Control of Volatile Organic Compounds from Paper Coating.
Section 5-261(3) – Control of Hazardous Air Contaminants - Hazardous Most Stringent Emission Rate. <i>Applicable to latex coatings on paper making operations.</i>
Section 5-402 – Written Reports When Requested.
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 Construct and Operate issued on February 12, 2008 (#AOP-05-018b). 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 Construct and Operate (#AOP-10-038).

(iv) Federal Requirements:

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

40 CFR Part 60, Subpart Dc - Standards of Performance for Small Industrial-Commercial- Institutional Steam Generating Units. Applies to all boilers 10 MMBTU/hr or greater manufactured after June 9, 1989. Units larger than 30 MMBTU per hour installed after February 27, 2005 are subject to additional particulate matter requirements.

Applicable to the new Cleaver-Brooks boiler #2 installed in 2008.

The Permittee notified both the Agency and the U.S. EPA in writing of the date construction of the Cleaver Brooks #2 boiler was commenced on July 2, 2008.

The Permittee notified the Agency and the U.S. EPA in writing of the actual date(s) of initial start-up of the Cleaver Brooks #2 boiler on September 10, 2008.

**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. Applies to new and existing fuel oil and solid fuel fired boilers located at area sources (major sources are subject to Subpart DDDDD). Natural gas or propane fired boilers are not subject. This gas exemption allows use of backup fuel during gas curtailments and up to 48 hours of elective use. Oil fired hot water boilers less than 1.6 MMBTU/hr are not subject. The rule requires a tune-up for each boiler once every two years except boilers with oxygen trim and oil boilers less than 5 MMBTU/hr must conduct tune-ups every five years. New boilers greater than 10 MMBTU/hr are subject to PM emission limits. Boilers that commenced construction on or before June 4, 2010 are considered an existing source.

All the boilers at the facility are considered existing boilers subject to this regulation because they are permitted to use No.6 fuel oil beyond just natural gas curtailment and up to 48 hours of elective operation. Because the Permittee is proposing to retain this use of fuel oil in the boilers, they will continue to be subject to Subpart JJJJJ. The facility filed its initial notification on September 12, 2011 and completed its initial boiler tune-ups and energy assessment audit March 03, 2014. Notification of compliance status for the boiler tune-ups and energy assessment audit with the Compliance Emissions Data Reporting Interface (CEDRI) system has been completed.

40 CFR Part 63, Subpart ZZZZ - National Emission Standards for Hazardous Air Pollutants for Reciprocating Internal Combustion Engines. Applies to new engines that commenced construction (installed) on or after June 12, 2006 at area sources of HAPs. Requires such engines to comply with NSPS Subpart IIII or JJJJ, as applicable. Also applies to existing engines that commenced construction (installed) prior to June 12, 2006 at area sources of HAPs. By May 3, 2013 requires engines equal and greater than 300 bhp to meet CO emission standards which may necessitate catalytic controls, must install crankcase ventilation system, and requires ULSD fuel. Engines <300 bhp need only meet maintenance requirements including changing oil & filter and, inspecting and replacing if necessary, air filter, hoses and belts. Does not apply to emergency units at residential/commercial/institutional facilities unless they are enrolled in demand response programs. Subject emergency units are subject to maintenance requirements, must install an elapsed hour meter and must use ULSD commencing January 1, 2015 if used for DR.

The emergency generator at this Facility is currently non-operational. If and when it becomes operational, it will be subject to Subpart ZZZZ due to its classification as an 'industrial' facility and 'emergency' status. Permittee must notify the Agency prior to restoring the generator to operational status. The emergency fire pump is subject to Subpart ZZZZ for maintenance requirements as well as the required hour meter.

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

Clean Air Act §§114(a)(3) Inspections, Monitoring and Entry; 502(b) Permit Programs; and 504(a)-(c) Permit Requirements and Conditions; 40 *CFR* Part 64 Compliance Assurance Monitoring; 40 *CFR* Part 70 §§70.6(a)(3)(i)(B) and 70.6(c)(1) State Operating Permit Programs - Permit content. Upon renewal of a Title V Permit to Operate, a facility must comply with enhanced monitoring and compliance assurance monitoring requirements if applicable. The CAM rule applies to each Pollutant Specific Emission Unit (PSEU) at a major source that is required to obtain a part 70 or part 71 permit if the unit satisfies all of the following criteria: **1)** The unit is subject to an emission limitation or standard for the applicable regulated air pollutant other than an emissions limitation or standard that is exempt under §64.2(b)(1) [exempt limitations include emission limitations or standards proposed by the Administrator after November 15, 1990 pursuant to Section 111 or 112 of the Act], **2)** The unit uses a control device to achieve compliance with any such limit or standard; and **3)** The unit has pre-control device emissions of the applicable regulated pollutant that are equal to or greater than 100 percent of the amount, in tons per year, required for a source to be classified as a major source.

The Compliance Assurance Monitoring requirements do not apply to this Facility since the potentially affected units are not equipped with an emission control device.

Clean Air Act §112r Prevention of Accidental Release; 40 *CFR* Part 68 Chemical Accident Prevention Programs. Facilities that have more than the threshold quantity of a regulated substance in a process are subject to these provisions including the requirements to conduct a hazard assessment, establish a prevention program and develop a risk management plan.

The Permittee has stated that the Facility does not have more than the threshold quantity of a regulated substance and thus is not subject to these requirements.

40 *CFR* Part 98 Mandatory Greenhouse Gas Reporting. Requires reporting of GHG emissions annually to EPA for **1)** facilities in source categories listed in §98.2(a)(1) including electric utility units subject to Acid Rain, MSW landfills that generate CH₄ in amounts equivalent to 25,000 metric tons of CO₂e or more per year and electrical transmission and distribution equipment at facilities where the total nameplate capacity of SF₆ and PFC containing equipment exceeds 17,820 pounds, **2)** facilities in source categories listed in §98.2(a)(2) including electronics manufacturing, iron and steel production and pulp and paper manufacturing that emit 25,000 metric tons of CO₂e or more per year from such source categories as well as all stationary combustion, **3)** facilities with stationary combustion sources that aggregate to 30 MMBTU/hr or more and which emit 25,000 metric tons of CO₂e or more per year from all stationary combustion sources combined, and **4)** fuel suppliers including all local natural gas distribution companies.

*The U.S. EPA has retained the implementing authority for this regulation and is responsible for determining applicability. This regulation under Part 98 is not considered to be an applicable requirement per 40 *CFR* Part 70.2 and as noted in 74 *FR* 56260 (October 30, 2009). Part 98 is anticipated to apply to the Facility and the Facility has filed such reports for years 2010, 2011, 2012 and 2013.*

(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 ("HMSER") for the respective HAC.

The Agency has determined that the Facility will have regulated emissions of acetaldehyde and vinyl acetate in excess of their respective Action Level. These contaminants are residual components of the latex coating applied to the paperboard product. The Agency has determined the HMSER to be an acetaldehyde and vinyl acetate content limit of 450 ppm each, as applied, for any latex coating components used in the paperboard manufacturing process. This HMSER evaluation shall be subject to re-evaluation five (5) years from the date of its determination and shall remain in effect until revised by the Agency.

Hazardous Most Stringent Emission Rate Determinations		
Date of Determination/ Permit #	Pollutant	Description/Emission limit
February 12, 2008 #AOP-05-18b	acetaldehyde and vinyl acetate	No latex product used in paper coatings at the Facility shall contain acetaldehyde and/or vinyl acetate in excess of 350 ppm and 450 ppm, respectively.
June 10, 2014 #AOP-10-038	acetaldehyde and vinyl acetate	HMSER shall be an acetaldehyde content limit of 450 ppm and a vinyl acetate content limit of 450 ppm, as applied, for latex coating components used in the paperboard manufacturing process.

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 or is subject to an acceptable schedule of compliance. Therefore, pursuant to 10 VSA §§556 and 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 construct and 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) or their equivalent as approved by the Agency. [10 V.S.A. §§556(c) and 556a(d)] [§5-501(1) of the *Regulations*]
- (2) While operating on greater than 1.0% sulfur by weight fuel oil, the Permittee shall not operate more than two (2) boilers concurrently if the Wickes Boiler #1 is one of the boilers operating. While operating on 1.0% or less sulfur by weight fuel oil the Permittee shall not operate more than any three (3) boilers concurrently except when operating on 0.5% or less sulfur by weight fuel oil in which case all boilers may operate concurrently. For the purpose of this condition, additional boilers may be operated for a period not to exceed 2 hours during transition of load from one boiler to another and may also be available in "standby" mode and not considered to be in operation. Standby mode shall be defined as a mode of operation which does not produce a measurable steam output. [10 V.S.A. §556(c)] [§5-406 of the *Regulations*]
- (3) Stack heights: The Facility shall vent exhaust from its equipment, vertically through stacks of the following heights. Stack heights are referenced to the facility base elevation of 275' above MSL.

Exhaust Source	Stack Height (Feet)
Wickes Boiler #1	193
Cleaver Brooks Boiler #2	167 feet except a 100 foot stack may be used when firing exclusively natural gas and exhausting through the stack heat recovery system (CONDEX).
B&W Boiler #3	
B&W Boiler #4	
Coating Mixer	
Cylinder Exhaust #1	12
Cylinder Exhaust #2	29
Diesel Generator	39
Fire Pump	32
Line 1, Drier #1	60
Line 1, Drier #1b	
Line 2, Drier #2	40
Line 2, Drier #2b	
	39

¹ The stack for the fire pump is not vertical; it exhausts horizontally through a goose neck stack and is authorized based on limited use.

The Permittee shall, at the request of the Agency, increase the stack height of any respective stack if, in the judgment of the Agency based on inspections of the actual operations at the Facility, proper or adequate dispersion cannot be maintained at the current stack height. 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 of a type that has not been approved by the Agency. [10 V.S.A. §§556(c) and 556a(d)] [§5-406 of the *Regulations*] [Application for #AOP-96-019]

- (4) Each boiler shall be equipped with a steam output chart or equivalent recording device. Each steam chart or recording device shall be operational whenever the boilers are operated. The steam output record shall be made available to the Agency upon request. [10 V.S.A. §556(c)] [AP-96-019]

- Operational Limitations -

- (5) Boilers: The annual fuel oil consumption in the Cleaver-Brooks Boiler #2 shall not exceed 946,354 gallons of fuel oil based upon any rolling twelve (12) consecutive calendar month period. [10 V.S.A. §§556(c), 556a(d)] [§5-501 of the *Regulations*] [#AOP-05-018b]
- (6) Boilers: The fuel oil burned in the Cleaver-Brooks Boiler #2 at the Facility shall not exceed a maximum sulfur content of 0.5 percent by weight. The fuel oil burned in the Wickes Boiler #1 and the B&W Boilers #3 and #4 at the Facility shall not exceed a maximum sulfur content of 2.0 percent by weight.

Notwithstanding the above, commencing on July 1, 2014, the sulfur content of No.2 and lighter distillate oils shall not exceed 0.05 percent by weight and commencing July 1, 2018 such oils shall not exceed 0.0015 percent by weight. Commencing on July 1, 2018, the sulfur content of No.4 residual oil and No.5/No.6 residual fuel oil shall not exceed 0.25 percent and 0.5 percent by weight, respectively. [10 V.S.A. §§556(c) and 556a(d)] [§§5-501 and 5-1015(a)(1) of the *Regulations*] [§5-221(1)(a) of the *Regulations*] [40 CFR Part 60 Subpart Dc §§60.42c(h) and 60.48c(f)]

- (7) Boilers: 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 requirements, as applicable, 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. All boilers at this facility are subject to this regulation since they were installed prior to the regulatory cut-off date (June 4th, 2010).
 - (b) A one-time energy assessment of the boilers as well as any required energy use systems at the Facility as required by 40 *CFR* §63.11201(b) was due no later than March 3rd, 2014. The energy assessment was completed in December, 2013.
 - (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 Agency and EPA no later than January 20, 2014. Permittee submitted initial notification on September 12th, 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 120 days after the initial tune-up compliance date of March 21, 2014. Initial tune-ups for all boilers were completed by December 10th, 2013. The first subsequent tune-up is due no later than January 10th, 2016.
 - b. Notification of the completion of the energy assessment must be submitted no later than July 19, 2014. Notification via CEDRI was completed in June, 2014.
 - (iii) §63.11225(b): Biennial Compliance Certification:
 - a. You must conduct a performance tune-up for each affected existing and new boiler according to §63.11223(b)-(f) every 2 years and you must certify every 5 years in your Compliance Certification Report that you complied with the requirements in §63.11223 to conduct a tune-up. You do **not** need to submit the interim-cycle report, but it can be requested by your delegated authority (§63.11225(b)) at any time.
- [40 *CFR* Part 63 Subpart JJJJJJ] [40 *CFR* Part 63]
- (8) Diesel Generators/Engines: In accordance with 40 *CFR* Part 63 Subpart ZZZZ (National Emission Standards for Hazardous Air Pollutants: Stationary Reciprocating Internal Combustion Engines (RICE) at area sources), the Permittee shall comply with the following requirements, as applicable, for emergency engines including both the emergency generator (when in service) and the emergency fire pump as well as all other applicable requirements of this regulation.
- (a) §63.6603(a) Table 2d: Emergency Engine Periodic Maintenance:
 - (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 replace as necessary
- (iii) Inspect all hoses and belts every 500 hours of operation or annually, whichever comes first, and replace as necessary.
- (b) §63.6625 (f): Emergency Engine Hour Meter:
 - (i) Permittee must have a functional non-resettable hour meter on the engine.
- (c) §63.6655: Record Keeping:
 - (i) Records must be kept of the maintenance conducted on the stationary RICE and air pollution control equipment in order to demonstrate that the Permittee operated and maintained the stationary RICE and after-treatment control device (if any) according to the Permittee's maintenance plan.
 - (ii) Permittee must keep records of the hours of operation of the engine that is recorded through the non-resettable hour meter. The owner/operator must document how many hours are spent for emergency operation, including what classified the operation as emergency and how many hours are spent for non-emergency operation. If the engines are used for demand response operation, the owner/operator must keep records of the notification of the emergency situation, and the time the engine was operated as part of demand response.
 - (iii) A copy of each notification and report that was submitted to comply with this subpart, including all documentation supporting any Initial Notification or Notification of Compliance Status previously submitted, according to the requirement in §63.10(b)(2)(xiv).
 - (iv) Records of the occurrence and duration of each malfunction of operation (i.e., process equipment) or the air pollution control and monitoring equipment.
 - (v) Records of performance tests and performance evaluations as required in §63.10(b)(2)(viii)
 - (vi) Records of actions taken during periods of malfunction to minimize emissions in accordance with §63.6605(b), including corrective actions to restore malfunctioning process and air pollution control and monitoring equipment to its normal or usual manner of operation.
- (d) §63.6650(h): Reporting Requirements: Annual reports are due according to the requirements in the following paragraphs:
 - (i) The report must contain the following information:
 - Company name and address where the engine is located.
 - Date of the report and beginning and ending dates of the reporting period.
 - Engine site rating and model year.
 - Latitude and longitude of the engine in decimal degrees reported to the fifth decimal place.
 - Hours operated for maintenance checks and readiness testing, including the date, start time, and end time for engine operation
 - Fuel deviations; If there were deviations from the fuel requirements that apply to the engine (if any), information on the number, duration, and cause of deviations, and the corrective action taken. If no deviations, state as such.
 - (ii) The report must also identify the entity that dispatched the engine and the situation that necessitated the dispatch of the engine.
 - (iii) The first annual report must cover the calendar year 2015 and must be submitted no later than March 31, 2016. Subsequent annual reports for each

calendar year must be submitted no later than March 31 of the following calendar year.

- (iv) The annual report must be submitted electronically using the subpart specific reporting form in the Compliance and Emissions Data Reporting Interface (CEDRI) that is accessed through EPA's Central Data Exchange (CDX) (www.epa.gov/cdx). However, if the reporting form specific to this subpart is not available in CEDRI at the time that the report is due, the written report must be submitted to the Administrator at the appropriate address listed in §63.13.
- (e) §63.6605 Continuous Compliance Requirements:
 - (i) Permittee must be in compliance with the emission limitations, operating limitations, and other requirements in this subpart that apply at all times.
 - (ii) At all times Permittee must operate and maintain any affected source, including associated air pollution control equipment and monitoring equipment, in a manner consistent with safety and good air pollution control practices for minimizing emissions. The general duty to minimize emissions does not require you to make any further efforts to reduce emissions if levels required by this standard have been achieved. Determination of whether such operation and maintenance procedures are being used will be based on information available to the Administrator which may include, but is not limited to, monitoring results, review of operation and maintenance procedures, review of operation and maintenance records, and inspection of the source.
 - (iii) Permittee must abide by the applicable compliance requirements addressed in §63.6640 including demonstration of continuous compliance with each emissions limitation, operating limitation, and other requirements as well as reporting instances of deviations from emissions and operating limitations.

[40 CFR Part 63 Subpart ZZZZ 63.6603 Table 2d], [[40 CFR Part 63 Subpart ZZZZ 63.6625 (a), (b), (e), (f), (h)], [40 CFR Part 63 Subpart ZZZZ 63.6605, 63.6640 & 63.6655 except (c)]]

- (9) Stationary diesel generators/engines including the emergency generator (when in service) and the emergency fire pump may only use distillate or lighter grade fuel oils with a maximum sulfur content not to exceed 0.05 percent by weight (500 ppm) unless the Permittee obtains prior written approval from the Agency to use another type of fuel.

Unless otherwise further restricted above, commencing on July 1, 2018, the sulfur content of No.2 and lighter distillate oils shall not exceed 0.0015 percent by weight. [10 V.S.A. §§556(c) and 556a(d)] [§§5-501 and 5-1015(a)(1) of the *Regulations*] [§5-221(1)(a) of the *Regulations*]

- (10) Generators/Engines: The Permittee shall not install or operate a stationary reciprocating internal combustion engine, as defined in the *Regulations*, unless the engine complies with §5-271 of the *Regulations* as may be applicable as well as any federal regulations including NSPS Subpart IIII and NESHAP ZZZZ, as may be applicable. All engines, including emergency generators/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*] [40 CFR Part 60 Subpart IIII]

and Part 63 Subpart ZZZZ]

- (11) Emergency Generators/Engines: Stationary emergency generators/engine, including the 1950 diesel generator and the emergency fire pump noted in Finding of Fact (A), shall be used only for emergency purposes and up to 100 hours per year for routine testing and maintenance. The emergency generator is currently out of commission. Permittee must notify the Agency upon restoration to normal service. Emergency purposes are limited to periods of time when:
- (a) The usual source of power, heat or lighting is temporarily unavailable due to reasons beyond the reasonable control of the owner/operator;
 - (b) The Independent System Operator has determined a power capacity deficiency exists and has implemented a voltage reduction of five (5) percent or more of normal operating voltage; or
 - (c) A fire or flood makes it necessary to pump water to minimize property damage.

In the event the Permittee must take action to restore the normal power source, the Permittee must take such action in a reasonable period of time. Emergency engines shall not be operated as part of any other ISO or utility peaking or load shedding activities without the approval of the Agency. The definition of emergency use for applicability to federal regulations NSPS Subpart IIII and NESHAP Subpart ZZZZ may be different and the Permittee should consult those regulations directly for applicability to those respective regulations. [10 V.S.A. §§556(c) and 556a(d)] [§§5-401(6)(c) and 5-501 of the *Regulations*]

- (12) 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 -

- (13) Nitrogen Oxides [Facility Wide]: In order to maintain Facility emissions of nitrogen oxides (NO_x) below the threshold of §5-251(3) of the *Regulations*, the Permittee shall limit emissions of nitrogen oxides from the entire Facility, including all boilers, paperboard machines, and emergency generators as well as all other stationary fuel burning equipment, to less than one-hundred (100) tons per year based on any rolling twelve (12) consecutive calendar month period. For the purposes of this condition, NO_x emissions shall be calculated in accordance with the following:

$$NO_x \text{ TPY} = \{ [GPY_{resid \text{ oil}} \times EF_{resid \text{ oil}}] + [GPY_{dist \text{ oil}} \times EF_{dist \text{ oil}}] + [SCF_{NG} \times EF_{NG}] \} \div 2000 \frac{lbs}{ton} < 100 \text{ tpy}$$

Where:

GPY = total gallons of the respective fuel oil burned

SCF_{NG} = Standard Cubic Feet on Natural Gas burned

$EF_{resid \text{ oil}}$ = Emissions Factor for residual oil = $55 \frac{lbs}{10^3 \text{ gal}}$

$EF_{dist \text{ oil}}$ = Emissions Factor for distillate oil = $20 \frac{lbs}{10^3 \text{ gal}}$

$$EF_{NG} = \text{Emissions Factor for Natural Gas} = 100 \frac{\text{lbs}}{10^6 \text{ SCF}}$$

[10 V.S.A. §§556(c) and 556a(d)] [§§5-251(3) of the *Regulations*] [application for #AOP-01-026]

- (14) **Sulfur Oxides [Facility Wide]:** Emissions of sulfur dioxide (SO₂) from the Facility shall not exceed one-hundred sixty-one (161) tons per year, based on any rolling twelve (12) consecutive calendar month period. For purposes of this condition, SO₂ emissions shall be calculated in accordance with the following:

$$SO_{x \text{ tpy}} = \sum GPY_{\text{fuel oil burned in all boilers}} \times EF \times \%S \div 2000 < 161 \text{ TPY } SO_2$$

Where:

GPY = Total gallons of fuel oil burned in all boilers collectively,

EF = Emission Factor for residual oil = $0.157 \frac{\text{lbs}}{\text{gal}}$; for distillate oil = $0.142 \frac{\text{lbs}}{\text{gal}}$

%S = Weighted average sulfur content of the fuel expressed as percent by weight. For example if the sulfur content of the fuel is 0.5% sulfur by weight, the value 0.5 would be entered in the formula.

[10 V.S.A. §§556(c) and 556a(d)] [§5-501 of the *Regulations*] [Application for #AP-96-019]

- (15) **Particulate Matter [Boilers]:** Emissions of particulate matter (PM), including condensable PM, from the four central heating plant boilers shall not exceed the following limits:

PM Emission Limitations		
Unit	Emission Limitations	
	lbs/MMBTU ¹	lbs/hour ²
Wickes Boiler #1	0.18	16.0
Cleaver-Brooks Boiler #2	0.30	8.9
B&W Boiler #3	0.29	9.6
B&W Boiler #4	0.29	9.0

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

² 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 40 *CFR* Part 60, Appendix A, Reference Method 5 and 202 or alternative methods which have been published in 40 *CFR*, provided the federally approved alternative method has been accepted in writing by the Agency before testing. [10 V.S.A. §§556(c) and 556a(d)] [§§5- 231 and 5-404 of the *Regulations*]

- (16) **Particulate Matter:** Emissions of PM, including condensable PM from any 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 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*]

- (17) 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*]

- (18) Visible Emissions [Specific Installations prior to April 30, 1970]: Emissions of visible air contaminants from Coating Dryer #1 and #2, Wickes Boiler #1, B & W #3 and #4 and any other installation at the Facility 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(2), 5-211(3) and 5-404 of the *Regulations*]

- (19) Coating Limit: With the exception of the paragraph below, the Facility shall not cause or allow the application of any coatings on its paper coating lines with a VOC content in excess of 2.9 pounds per gallon of coating, (excluding water and exempt compounds), as applied. [10 V.S.A. §556(c)] [§5-253.10 of the *Regulations*]

If multiple coatings are applied during the same day, the Facility shall not cause or allow the application of coatings whose daily-weighted average VOC content exceeds 2.9 pounds per gallon ("lbs/gallon"), excluding water and exempted compounds, as applied.

$$E_{VOC} = \frac{\sum_{i=1}^{i=n} M_i C_i}{\sum_{i=1}^{i=n} M_i}$$

The daily-weighted average VOC content shall be calculated as follows:

Where:

E_{VOC} = the daily weighted average VOC content in lbs/gallon, excluding water and exempted compounds, as applied.

M_i = The total mass usage of an individual coating applied in 24-hour period in units of gallons per day.

C_i = The VOC content of the individual coating applied during the 24-hour period in units of lbs/gallon excluding water and exempted compounds, as applied.
 i = Each individual coating applied in the 24-hour period.

Any testing that is conducted to demonstrate compliance with the above VOC contents limits shall be performed in accordance with Reference Method 24 of Appendix A of 40 CFR Part 60 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. [10 V.S.A. §556a(d)] [AOP-95-148]

- (20) Volatile Organic Compounds: Emissions of volatile organic compounds from the Facility shall not equal or exceed fifty (50) tons per calendar year per year based on any rolling twelve (12) consecutive calendar month period. [§5-502 of the *Regulations*]
- (21) 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]
- (22) 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*]
- (23) Fugitive Emissions: The Permittee shall take reasonable precautions at all times to control and minimize emissions of fugitive particulate matter and volatile organic compounds from the operations at the Facility. This shall include but not be limited to covering coating and solvent containers containing VOC materials when not in use.

[10 V.S.A. §§556(c) and 556a(d)] [§5-231(4) of the *Regulations*] [10 V.S.A. §§556(c) and 556a(d)] [§5-231(4) of the *Regulations*]
- (24) 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. [§5-241(1) and (2) of the *Regulations*]

- Compliance Testing and Monitoring -

- (25) The annual mean concentrations of acetaldehyde and vinyl acetate in each latex product used in paper coatings at the Facility shall not exceed 450 ppm, respectively. The Permittee shall either obtain test data from the manufacturer for each batch of latex product delivered to the Facility or shall test each latex product quarterly for the acetaldehyde and vinyl acetate concentrations. Testing for new latex products shall also

be completed prior to first use. The Permittee shall furnish the Agency with a written annual report of the results of each such test and the annual mean concentration of acetaldehyde and vinyl acetate. The report shall also include the date of the test(s), the name and contact of the laboratory that conducted the test, and the procedure and or test method used to conduct the test. At least thirty (30) days prior to performing the first test of the acetaldehyde and vinyl acetate content of a latex coating, the Permittee shall submit the procedure and test method to be used for conducting the test for approval to the Agency. [§§5-402(1), 5-404(1), 5-405(1) and 5-1015(a)(3) and (4) of the *Regulations*] [§5-261 of the *Regulations*]

- (26) The Permittee shall perform emissions testing on either the B&W Boiler #3 or B&W Boiler #4 for NO_x and Combustion Efficiency when burning gas. The Permittee shall also perform emissions testing on the same boiler for NO_x, PM, and Combustion Efficiency when firing oil if more than 250,000 gallons of oil were burned at the Facility since the prior testing on gas. A written report of the results shall be furnished to the Agency within thirty (30) days after the completion of the testing. Emission testing shall be performed during calendar year 2016 and shall be conducted at a minimum once every five years thereafter on whichever boiler was not tested the prior test. The emission testing shall be performed in order to demonstrate compliance with the emission limitations and emission factors specified within the conditions of this Permit. At least thirty (30) days prior to performing the emission testing required above, the Permittee shall submit to the Agency a pretest report prepared in accordance with the Agency's "Source Emission Testing Guidelines". [§§5-402(1), 5-404(1), 5-405(1) and 5-1015(a)(3) and (4) of the *Regulations*]
- (27) Boiler combustion efficiency: The Permittee shall perform combustion efficiency testing of each of the boilers by measuring the concentrations of carbon dioxide ("CO₂") and carbon monoxide ("CO") in the exhaust gases while burning the predominant fuel used during the preceding six month period. Said testing shall be performed every six months at a minimum except more frequent testing shall be performed initially to develop the trigger level required as part of the O&M plan permit condition. The Permittee shall perform said testing of the CO₂ and CO concentrations using methods which have been approved in writing in advance by the Agency. 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 CO₂ 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,
 CO₂ = % 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*]

- (28) Operation and Maintenance Plan [Boiler]: The Permittee shall maintain and update, as appropriate, an operation and maintenance plan (O&M Plan) for the four central heating plant boilers. The purpose of said O&M Plan shall be to ensure the proper operation and maintenance of the boilers in order to ensure optimum performance and continuous compliance with the respective conditions and emission limits of this Permit. Additionally the O&M Plan shall help ensure good control of carbon monoxide emissions. The O&M Plan shall include, but not be limited to:
- (a) Methods for determining a combustion efficiency trigger level for each affected boiler. The trigger level shall be based on a minimum of 12 CE tests performed during operating conditions that are representative of the typical operating range of the respective boiler. The initial CE trigger level shall be established within one-hundred eighty (180) days after the issuance of this Permit. For boilers that only operate seasonally, the testing must be completed within one-hundred eighty (180) days of the start of its operating season;
 - (b) The procedures to be followed to increase combustion efficiency whenever the combustion efficiency is determined to be less than the trigger level;
 - (c) Descriptions of routine maintenance and inspection procedures including a description of the procedure for and frequency of ash removal from the boiler and the particulate matter emission control device;
 - (d) Provisions for maintaining records of maintenance and inspection procedures, including both routine activities and actions taken in response to observations of low combustion efficiency; and
 - (e) Provisions for calibration and maintenance of any testing instruments and/or equipment used to measure the concentrations of CO₂ and CO in the boiler exhaust gases.

Failure to take reasonable steps in accordance with said plan to increase the combustion efficiency once it has fallen below the trigger level may be considered credible evidence of exceeding the opacity and particulate emission limits set forth in this Permit. Said O&M Plan shall be present at the Facility at all times and shall be made available to representatives of the Agency upon request. The Permittee shall revise said O&M Plan at the Agency's request or on its own motion based on operating experience or to reflect equipment or operational changes. [10 V.S.A. §§556(c) and 556a(d)] [§5-405(1) of the *Regulations*]

- Record Keeping and Reporting -

- (29) Records of Fuel Use: The Permittee shall maintain records of the total quantity of natural gas and fuel oil consumed in the boilers, in ft³ and gallons respectively, each month. At the beginning of each month, the Permittee shall calculate the total quantity of natural gas and fuel oil consumed in the boilers, in ft³ and gallons respectively, during the previous twelve (12) consecutive month period. [10 V.S.A. §§556(c) and 556a(d)] [§5-405(1) of the *Regulations*] [40 C.F.R. §60.48c(g)]

- (30) Records of Coatings Use: The Permittee shall maintain the following records regarding the coatings use at the Facility:
- (a) For its paper coating lines each day the name and identification number of the coatings, as applied, on each paper coating unit.
 - (b) The mass of VOC per volume of the coatings (excluding water and exempt compounds), as applied, used each day on each paper coating unit.
 - (c) For the coatings used at the Facility the Permittee shall maintain the following records:
 - (i) The weight of the coatings expressed in pounds;
 - (ii) The volatile organic compound (VOC) content of the coatings, expressed as a weight percentage;
 - (iii) The content of each individual known hazardous air contaminant (HAC) and hazardous air pollutant (HAP) contained in the coatings, expressed as a weight percentage.
 - (d) At the beginning of each month, the Permittee shall calculate the total quantity of coatings used the previous month, expressed in pounds for each.
 - (e) At the beginning of each month, the Permittee shall also calculate the total quantity of VOC, each individual HAC and each individual HAP emissions from the use of all coatings combined for the previous month and the previous twelve (12) consecutive calendar months, expressed in tons of VOC and pounds of each individual HAC and HAP.
 - (f) For the purposes of these calculations, 100 percent of the VOC, volatile HAC and volatile HAP content of the coatings shall be assumed to be emitted unless a lower percentage is approved in writing by the Agency.
 - (g) At the beginning of the calendar year, the Facility will verify and log the certified test result to ensure compliance of the HMSE limit for acetaldehyde and vinyl acetate. The Permittee will include the mean acetaldehyde and vinyl acetate concentration in ppm in each product, the name and contact information of the laboratory that conducted the test, and the procedure and or test method used to conduct the test.

[10 V.S.A. §§556(c) and 556a(d)] [§5-405(1) of the *Regulations*]

- (31) In addition to the record keeping requirements above, the Facility shall maintain the following records. Each month, the Facility shall calculate and record the total quantity of SO₂ and NO_x emissions during the previous (12) consecutive calendar month period.
- (32) Records of Combustion Efficiency Testing: The Permittee shall maintain records of the results of the combustion efficiency testing conducted on the four 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 concentration of oxygen if available, carbon monoxide and carbon dioxide in the exhaust gas as well as the calculated combustion efficiency. [10 V.S.A. §§556(c) and 556a(d)] [§§5-405(1) and 5-1015(a)(3) and (4) of the *Regulations*]
- (33) Records of Emergency Generator/Engine Usage: The Permittee shall maintain records in a log book, or electronic record system, of all hours of operation of each stationary

emergency generator/engine and shall make such records available to the Agency upon request. The records shall include: the dates on which each engine was operated; the number of hours the engine was operated on the respective date, including the starting and ending hours shown on the engine's elapsed hour meter; the purpose of the operation be it emergency, testing or maintenance; and, if the purpose of the operation was for an emergency, the records shall include a brief description of the emergency and its cause. [10 V.S.A. §§556(c) and 556a(d)] [§5-405(1) of the *Regulations*]

- (34) Records of Fuel Oil Certifications [Boilers]: The Permittee shall obtain from the fuel supplier, for each shipment of fuel oil received at the Facility for use in the boilers a certification or invoice regarding the sulfur content of the fuel oil. The certification or invoice shall include: the date of delivery, name of the fuel oil supplier, fuel type, quantity of fuel oil delivered, the sulfur content of the fuel delivered, and the location of the oil when the sample was drawn for analysis to determine the sulfur content of the oil, specifically including whether the oil was sampled as delivered to the affected facility, or whether the sample was drawn from oil in storage at the oil supplier's or oil refiner's facility, or other location, and the method used to determine the sulfur content of the oil. [10 V.S.A. §§556(c) and 556a(d)] [§5-405(1) of the *Regulations*] [40 CFR Part 60 Subpart Dc §§60.42c(h) and 60.48c(f)]
- (35) Records of Fuel Oil Certifications [Generators/Engines]: The Permittee shall obtain from the fuel supplier, for each shipment of fuel oil received at the Facility for use in the stationary diesel generators/engines, a certification or invoice regarding the sulfur content of the fuel oil. The certification or invoice shall include the date of delivery, name of the fuel oil supplier, fuel type, quantity of fuel oil delivered, and a statement from the fuel oil supplier that the oil complies with the specifications for Ultra Low Sulfur Diesel per 40 CFR Part 80.510(b) or a statement as to the sulfur content of the fuel oil in percent sulfur by weight. [10 V.S.A. §§556(c) and 556a(d)] [§5-405(1) of the *Regulations*] [40 CFR Part 60 Subpart III] [40 CFR Part 63Subpart ZZZZ]
- (36) Records: 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, 5-405(1) and 5-1015(5) of the *Regulations*]

- (37) Records: 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, 5-405(1) and 5-1015(a)(7) of the *Regulations*]
- (38) Notification: 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 and 5-1015(a)(6) of the *Regulations*]

- (39) **Notification:** The Permittee shall notify the Agency and the U.S. EPA in writing of the date construction of the Cleaver Brooks #2 boiler is commenced, postmarked no later than thirty (30) days after such date. This notification shall include the following information:
- (a) The design heat input capacity of the boiler(s);
 - (b) Identification of the fuel(s) to be burned in the boiler(s); and
 - (c) The annual capacity factor at which the Permittee anticipates operating the boiler based on all fuels fired and based on each individual fuel fired.

The Permittee filed such notification on July 2, 2008. [10 V.S.A. §556(c)] [40 CFR §60.7(a)(3)] [40 CFR Part 60 Subpart Dc §60.48c(a)]

- (40) **Notification:** The Permittee shall notify the Agency and the U.S. EPA in writing of the actual date(s) of initial start-up of the Cleaver Brooks #2 boiler postmarked no later than fifteen (15) days after such date(s). For the purposes of this Permit, the date of initial start-up for the boilers shall be defined as the date on which fuel is first burned in the boiler(s). Along with this notification, the Permittee shall include the following information:
- (a) Boiler manufacturer;
 - (b) Boiler model;
 - (c) Boiler serial number; and
 - (d) Boiler maximum rated heat input in units of MMBTU/hr.

The Permittee filed such notification on September 10, 2008. [10 V.S.A. §556(c)] [40 CFR §60.7(a)(3)] [40 CFR Part 60 Subpart Dc §60.48c(a)]

- (41) **Notification:** 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*. [10 V.S.A. §556(c)] [§§5-402 and 5-501 of the *Regulations*]

- (42) **Reporting: Semi-Annual Periodic Monitoring Reports:** The Permittee shall submit semi-annual reports to the Agency postmarked by the 30th day following the end of each reporting period. The reporting periods shall cover operations from January 1st through June 30th and July 1st through December 31st. The semi-annual reports shall be signed by a responsible official of the Facility and contain the following information regarding the preceding six (6) month reporting period:

- (a) a summary of the fuel usage records required by this Permit;
- (b) a summary of the NO_x and SO₂ emission calculations as required by this Permit;
- (c) a summary of the periodic combustion efficiency calculations required by this Permit;
- (d) a statement of the sulfur content of any and all fuel delivered to the Facility

- during the reporting period;
- (e) For stationary sources demonstrating compliance with the emission limitations of §5-253.10 of the *Regulations* through the use of compliant coatings, a statement that compliant coatings have been used each day in the semiannual reporting period;
 - (f) For stationary sources demonstrating compliance with the emission limitations of §5-253.10 of the *Regulations* through daily averaging, the averaging calculations completed in accordance with §5-253.10, as applicable, for each day within the semiannual reporting period and a statement that the source is in compliance with the respective standard;

[10 V.S.A. §§556(c) and 556a(d)] [40 CFR Subpart Dc §§60.48c(d), 60.48c(e), 60.48c(f) and 60.48c(j)], [10 V.S.A. §§556(c) and 556a(d)] [§5-405(1) of the Regulations] [40 CFR Part 60 Subpart Dc §§60.42c(h) and 60.48c(f)]

- (43) Reporting: Semi-Annual Periodic Monitoring Reports: For the Cleaver Brooks boiler #2 subject to NSPS Dc, the Permittee shall submit semi-annual reports to the Agency and the U.S. EPA postmarked by the 30th day following the end of each reporting period. The reporting periods shall cover operations from January 1st through June 30th and July 1st through December 31st. If no fuel oil is burned during a calendar year the minimum reporting frequency is reduced to annual. The Permittee may submit a written report to the Agency and the U.S. EPA, representing the preceding calendar year. Such semi-annual or annual reports shall include the following information:
- (a) Calendar dates covered in the reporting period;
 - (b) Either records of fuel supplier certifications as required by this Permit or a statement that no fuel oil was burned during the reporting period; and
 - (c) A certified statement signed by a responsible official of the Facility that the records of fuel supplier certifications submitted represent all of the fuel combusted during the reporting period.
- (44) Reporting: 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.
 - (e) Emissions of VOCs from the Facility are less than fifty (50) tons per year;
 - (f) Emissions of federal HAPs from the Facility are less than ten (10) tons per year for each individual HAP and less than twenty-five (25) tons per year for total HAPs; and
 - (g) Emissions of each regulated state HAC is less than its respective Action Level (found in Appendix C of the *Regulations*) or the emission of the respective HAC has previously been reviewed and approved by the Agency under §5-261(3) of

- the *Regulations*
- (h) If necessary, the Permittee also shall identify any other material information that must be included in the certification to comply with section 113(c)(2) of the Act, which prohibits knowingly making a false certification or omitting material information.

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

- (45) 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. [Subchapter VIII §§5-802, 5-803, 5-807, 5-808 of the *Regulations*]

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

Agency of Natural Resources
Department of Environmental Conservation
Air Quality & Climate Division
One National Life Drive, Davis Building, Second Floor
Montpelier, Vermont 05620-3802

[§5-402 of the *Regulations*]

- (47) All records, notifications and reports 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 of the *Regulations*]

- Standard Permit Conditions -

- (48) 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. §§556(c) and 556a(d)] [40 CFR Part 60.11(d) and 63.6(e)]
- (49) 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 re-opened. 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. §556 and §556a, as amended. [10 V.S.A. §§556(d) and 556a(g)] [§§5-1008(a) and 5-1008(e) of the *Regulations*]
- (50) 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*]

- (51) 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. §§556(c) and 556a(d)] [§5-402 of the *Regulations*] [40 CFR Part 70 §70.6(a)(6)(v)]

- (52) 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. §§556(c), 556a(d) and 557] [§§5-402, 5-404, and 5-1015(a)(10) of the *Regulations*]
- (53) 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. §§556(c) and 556a(d)] [§§5-505 and 5-1006(f) of the *Regulations*]
- (54) 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. §§556(c) and 556a(d)]
- (55) 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. §§556(c) and 556a(d)] [§§5-1008(a) and 5-1008(e) of the *Regulations*]
- (56) 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. §§556(c) and 556a(d)]
- (57) 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*]
- (58) 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. §§556(c) and 556a(d)]
- (59) 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. §§556(c) and 556a(d)]
- (60) 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. §§556 and 556a] [§§5-501, 5-1004, and 5-1013(a) of the *Regulations*]

- (61) Renewable Energy Projects – Right to Appeal to Public Service Board. If this decision relates to a renewable energy plant for which a certificate of public good is required under 30 V.S.A. §248, any appeal of this decision must be filed with the Vermont Public Service Board pursuant to 10 V.S.A. §8506. This section does not apply to a facility that is subject to 10 V.S.A. §1004 (dams before the Federal Energy Regulatory Commission), 10 V.S.A. §1006 (certification of hydroelectric projects) or 10 V.S.A. Chapter 43 (dams). Any appeal under this section must be filed with the Clerk of the Public Service Board within 30 days of the date of this decision; the appellant must file with the Clerk an original and six copies of its appeal. The appellant shall provide notice of the filing of an appeal in accordance with 10 V.S.A. 8504(c)(2), and shall also serve a copy of the Notice of Appeal on the Vermont Department of Public Service. For further information, see the Rules and General Orders of the Public Service Board, available on line at www.psb.vermont.gov. The address for the Public Service Board is 112 State Street, Montpelier, Vermont, 05620-2701 (Tel. # 802-828-2358).
- (62) All Other Projects – Right to Appeal to Environmental Court. 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 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 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. The address for the Environmental Court is 2418 Airport Road, Suite 1, Barre, VT 05641 (Tel. # 802-828-1660).
- (63) Conditions (1) through (6), (14), and (26) are derived from the new source review requirements of Subchapter V of the *Regulations*. With the exception of the cited new source review conditions, this Operating Permit shall expire as indicated on the 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*]

- (64) 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. §§556(c) and 556a(d)]

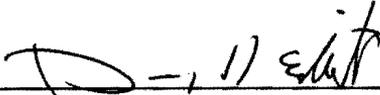
The Agency's issuance of this Air Pollution Control Permit relies upon the data, judgment, and other information supplied by the Permittee. The Agency makes no assurances that the air contaminant source approved herein will meet performance objectives or vendor guarantees supplied to the source Permittee. 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 12th day of November, 2014.

Agency of Natural Resources

David K. Mears, Commissioner
Department of Environmental Conservation

By:



Doug Elliott, Acting Director
Air Quality & Climate Division

mg
A2 Rock-Tenn – Sheldon, VT



State of Vermont
Department of Environmental Conservation
Air Quality & Climate Division
Davis Building – 2nd Floor
One National Life Drive
Montpelier, VT 05620-3802
(802) 828-1288
FAX (802) 828-1250

AGENCY OF NATURAL RESOURCES

November 12, 2014

ROCK-TENN CONVERTING COMPANY
Attn.: Mr. Roger Thieken
369 Mill Street
Sheldon Springs, VT 05485

RE: Final Air Pollution Control Permit to Construct and Operate (#AOP-10-038)

Dear Mr. Thieken:

The Vermont Agency of Natural Resources (ANR) Department of Environmental Conservation (DEC) Air Quality & Climate Division (Agency) has completed its review of ROCK-TENN CONVERTING COMPANY's application for the proposed heat recovery system and renewal of the Permit to Operate the paperboard manufacturing facility located at 369 Mill Street in the town of Sheldon Springs, Vermont. The Agency is now issuing a final Air Pollution Control Permit to Construct and Operate approving the proposed project.

Consistent with the provisions of 10 V.S.A. §556(e) and for the purposes of reducing the administrative burden of enforcing two separate permits for this Facility, the Agency is incorporating the existing Permit to Construct requirements contained in the prior Air Pollution Control Permit to Construct and Operate (#AOP-05-018b) previously issued on 2/12/2008 with the current renewal of the Air Pollution Control Permit to Operate. The result is a combined Air Pollution Control Permit to Construct and Operate which satisfies both the construction permit (10 V.S.A. §556 and Subchapter V of the Regulations) and operating permit (10 V.S.A. §556a and Subchapter X of the Regulations) requirements for your Facility. This combined permit incorporates and supersedes all prior Permit to Construct and/or Operate approvals issued in the past. Please note this permit is valid for a period of five (5) years and an application to renew the permit must be filed at least twelve (12) months prior to the date of expiration.

Please review this Permit carefully to ensure that you are currently, and continue to be, in compliance with all the requirements contained in this Permit. There are a few key points included in this permit or that you may otherwise be subject to that I would like to highlight for your convenience:

- This Permit formally authorizes the installation and operation of a boiler flue gas heat recovery system on boilers 2, 3, and 4 while operating exclusively on natural gas.
- Fuel oil sulfur: Consistent with New England regional efforts, Vermont has adopted regulations that will be lowering the allowed sulfur content of fuel oils between the years 2014 and 2018. As of July 1, 2014, the sulfur content of No.2 and lighter distillate oils purchased shall not exceed 0.05 percent by weight and commencing July 1, 2018 such oils shall not exceed 0.0015 percent by weight (15 ppm). Distillate fuel oils meeting the 0.0015% by weight sulfur limit are commonly referred to as ultra-low sulfur diesel (ULSD). Commencing on July 1, 2018, the



sulfur content of No.4 residual oil and No.5/No.6 residual fuel oil purchased shall not exceed 0.25 percent and 0.5 percent by weight, respectively. To the extent your permit may currently allow higher sulfur content fuel oils, this regulation will take precedence and further restrict your sulfur content on the respective dates. The Permit also requires obtaining a certification or invoice regarding the sulfur content of the fuel oil from the fuel supplier, for each shipment of fuel oil received at the Facility.

- Diesel generators/engines: Our understanding is that the emergency generator at this Facility is currently non-operational. If and when it becomes operational, it will be subject to Subpart ZZZZ due to Rock-Tenn's classification as an 'industrial' facility and the generator's 'emergency' status. *You must notify the Agency prior to restoring the generator to operational status.* The emergency fire pump is subject to Subpart ZZZZ for maintenance requirements as well as the required hour-meter.

If you have any questions or comments, please feel free to contact me by phone at (802) 477-3308, by email at martin.gildea@state.vt.us, or in writing at the above address.

Sincerely,

Martin Gildea

Digitally signed by Martin Gildea
DN: cn=Martin Gildea, o=Agency of Natural
Resources, ou=State of Vermont,
email=martin.gildea@state.vt.us, c=US
Date: 2014.11.12 11:32:53 -05'00'

Martin Gildea, Environmental Engineer
Engineering Services/Permitting Section
Air Quality & Climate Division

A2 Filename-Rock-Tenn Converting Company, Sheldon Springs, VT