

#AOP-14-032  
DEC#NS94-0007

Operating Permit Expiration Date: December 23, 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: December 23, 2014

Owner/Operator: FiberMark North America, Inc.  
P.O. Box 498  
Brattleboro, Vermont 05302

Source: Paperboard Manufacturing Facility  
FiberMark North America, Inc.  
161 Wellington Road  
Brattleboro, Vermont 05302

## FINDINGS OF FACT

### (A) FACILITY DESCRIPTION

FiberMark North America, Inc. (hereinafter referred to herein as "Permittee") owns and operates a paperboard manufacturing facility at 161 Wellington Road in Brattleboro, Vermont (also referred to herein as "Facility"). The Facility is listed under the North American Industry Classification System (NAICS): 322130 Paperboard Mills.

The Permittee has proposed to install and operate a natural gas fired drying oven for their roll-to-roll laminating machine (also referred to as laminating line).

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

<b>Equipment Specifications</b>			
Equipment/Make/Model	Capacity/size	Fuel type(s)	Date of installation
Two (2) Bigelow boilers	38 (each) MMBTU/hr <sup>1</sup>	No. 6 fuel oil SVO <sup>2</sup> Natural Gas	1960
Cummins Model DSFAE-826111 Tier 3 diesel generator	80 kW <sup>3</sup>	ULSD <sup>4</sup>	Manufacture Date September 2009
Safety-Kleen parts cleaner: One (1) Model 81 and three (3) Model 16.	na	na	unknown
Paper Coating Line #1	na	na	1988
Paper Coating Line #2	na	na	1985
Laminating Line – Drying Oven	3 MMBtu/hr	Natural Gas	Proposed 2014

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

<sup>2</sup> SVO – straight vegetable oil, also referred to as waste vegetable oil (WVO).

<sup>3</sup> kW – kilowatts of electrical output.

<sup>4</sup> ULSD – ultra low sulfur diesel fuel oil, maximum sulfur content of 0.0015% by weight.

na – not applicable

### (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 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 Approvals and Actions	
Date of Action	Description of Agency Approval/Action
June 14, 1984	Original Agency Permit to Construct approval for installation of a supplemental boiler.
March 12, 1986	Amendment to June 14, 1984 permit extending construction deadline. This amendment expired March 12, 1987 because construction was not begun.
December 17, 1997	#AP-97-022 – Agency Permit to Construct approval to allow for installation of a 10 MMBtu/hr supplemental boiler.
January 7, 1998	#AP-97-022a – Amendment to the #AP-97-022 Permit to Construct approval for installation of a 15 MMBtu/hr supplemental boiler instead of a 10 MMBtu/hr boiler.
April 29, 1998	#AP-97-022b – Amendment to the Agency Permit to Construct approval to increase the allowable No. 2 fuel oil usage in the supplemental boiler from 200,000 gallons per year to 280,000 gallons per year. The total 280,000 gallons per year does not result in greater than 10 tons per year of any one pollutant nor does the 80,000 gallon increase exceed 10 tons per year of all pollutants combined, therefore modeling was not required.
October 4, 2002	#AOP-95-174 – Initial Agency "Permit to Operate" approval for Facility issued as a combined permit incorporating the previously issued "Permit to Construct" approvals for the Facility.
March 7, 2003	#AOP-95-174a – Administrative amendment to #AOP-95-174 changing the name of Facility owner from FiberMark, Inc. to FiberMark North America, Inc.
January 13, 2005	#AOP-04-027 – Operating renewal and incorporation of hazardous most stringent emission rate determination for formaldehyde emissions.
July 25, 2007	#AOP-07-008 - Operating Permit renewal and addition of Straight Vegetable Oil as an alternate fuel for the Bigelow Boilers.
May 31, 2013	#AOP-13-002 – Permit to Construct allowing the use of natural gas as an alternative fuel in the Bigelow Boilers; and Operating Permit renewal.

## (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 proposed installation of the natural gas fired oven on the laminating machine 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*. Allowable emissions from the Facility are estimated to be greater than ten (10) tpy combined 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 10 VSA §556(e) the Agency has combined the Permit to Construct for the new laminating machine drying oven and the Permit to Operate 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) <sup>1</sup>						
PM/PM <sub>10</sub>	SO <sub>2</sub>	NO <sub>x</sub>	CO	VOCs	Total Criteria	HAPs <sup>2</sup>
31.8	431.6 <sup>3</sup>	<100	17.1	<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.

<sup>3</sup> Effective July 1, 2018, §5-221 of the *Regulations* reduces the acceptable sulfur content limit for No.6 fuel oil from 2.0% to 0.5%; the value of 431.6 is based on 2% sulfur content No.6 fuel oil.

## (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 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.

Based on the level of emissions from this Facility, it is not expected to cause or contribute to a violation of any ambient air quality standard or significantly deteriorate air quality. Therefore, an air quality impact evaluation was not required by the Agency for the proposed project. In addition, there has 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 the Vermont Air Pollution Control Regulations*</b>
Section 5-211(1) - Prohibition of Visible Air Contaminants, Installations Constructed Prior to April 30, 1970. This regulation applies to the two Bigelow boilers.
Section 5-211(2) - Prohibition of Visible Air Contaminants, Installations Constructed Subsequent to April 30, 1970. This regulation applies to the coating lines, and the laminating machine.
Section 5-221(1) - Prohibition of Potentially Polluting Materials in Fuel, Sulfur Limitation in Fuel. This regulation applies to all fuel burned in the facility boilers.
Section 5-231(3) - Prohibition of Particulate Matter; Combustion Contaminants. This regulation applies to the facility boilers.
Section 5-231(4) - Prohibition of Particulate Matter; Fugitive Particulate Matter.
Section 5-241 – Prohibition of Nuisance and Odor.
Section 5-251.3 – Control of Nitrogen Oxide Emissions (NO <sub>x</sub> RACT) This regulation applies to stationary sources with NO <sub>x</sub> emissions greater than 100 tons per year. NO <sub>x</sub> emissions are capped at 100 tons per year, as a result the facility is not subject to this regulation.
Section 5-253.10 - Control of Volatile Organic Compounds from Paper Coating. This regulation applies to the coating lines.
Section 5-253.14 - Control of Volatile Organic Compounds from Solvent Metal Cleaning. This regulation applies to the parts cleaners in use at the facility.
Section 5-261(3) – Control of Hazardous Air Contaminants - Hazardous Most Stringent Emission Rate. The HMSER determination limits formaldehyde emissions from the facility to less than 65 pounds per year.
Section 5-402 – Written Reports When Requested.
Section 5-403 – Circumvention.
Subchapter VIII – Registration of Air Contaminant Sources.
Subchapter X – Operating Permits.

\*Unless otherwise noted the entire facility is subject to the listed regulations

(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 issued on May 31, 2013 (#AOP-13-002). 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-14-032).

(iv) Federal Requirements:

<b>Applicable Requirements from Federal Regulations and the Clean Air Act</b>
<p><u>40 CFR Part 63, Subpart JJJJJJ</u> - 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. <i>Since Vermont has taken delegation of this federal regulation for Title V facilities, the Agency is the implementing authority and is responsible for determining applicability of this regulation. Subpart JJJJJJ applies to the two Bigelow boilers at the Facility. Since the Facility is not a major source of HAPs, the Facility is not subject to Subpart DDDDD.</i></p>
<p><u>40 CFR Part 60, Subpart IIII</u> - Standards of Performance for Stationary Compression Ignition Internal Combustion Engines (CI ICE). Applies to CI RICE model year 2007 and later as well as those ordered after July 11, 2005 and with an engine manufacture date after April 1, 2006. This standard also applies to stationary CI RICE that are modified or reconstructed after July 11, 2005. This regulation established emission rates for affected engines, requires routine engine maintenance and sets maximum sulfur content for the diesel fuel. Beginning October 1, 2010 applicable engines shall only use diesel fuel with a maximum sulfur content of 15 ppm (ULSD).</p> <p><i>Since Vermont has taken delegation of this federal regulation for Title V facilities, the Agency is the implementing authority and is responsible for determining applicability of this regulation. Subpart IIII applies to the 80 kW Cummins emergency diesel generator that was installed in 2009 at the Facility.</i></p>

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

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. Does not apply to emergency units at residential/commercial/institutional facilities but all other emergency units need only meet maintenance requirements and must install an elapsed hour meter.

*This regulation applies to the 80 kW Cummins emergency diesel generator that was installed in 2009 at the Facility. Compliance with Subpart ZZZZ for this engine is achieved by meeting the requirements of 40 CFR Part 60, Subpart IIII - Standards of Performance for Stationary Compression Ignition Internal Combustion Engines (CI ICE).*

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 CH<sub>4</sub> in amounts equivalent to 25,000 metric tons of CO<sub>2</sub>e or more per year and electrical transmission and distribution equipment at facilities where the total nameplate capacity of SF<sub>6</sub> 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 CO<sub>2</sub>e 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 CO<sub>2</sub>e 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.*

Clean Air Act §§114(a)(3), 502(b), and 504(a)-(c); 40 CFR Part 70 §§70.6(a)(3)(i)(B) and 70.6(c)(1); and 40 CFR Part 64 - Compliance Assurance Monitoring. Upon renewal of a Title V Permit to Operate, a facility must comply with enhanced monitoring and compliance assurance monitoring requirements for any emission unit with uncontrolled emissions in excess of the Title V major source threshold and which is subject to an emission standard and which is equipped with an emission control device.

*The Compliance Assurance Monitoring requirements do not apply to this Facility since the potentially affected units are not equipped with emission control device(s): there are no post combustion SO<sub>2</sub> control devices for the two Bigelow boilers.*

## (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.

Based on review of the Facility's annual product usage the Agency has determined that the Facility will have emissions of formaldehyde in excess of its Action Level. With the issuance of permit AOP-13-002, on May 31, 2013 the Agency reestablished that HMSER for formaldehyde as an emission limit of 65 pounds per year, correlating to an emission rate of 0.059 pounds per 8 hour period. An 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. The existing HMSER determination is still current and no further action is being taken in conjunction with the issuance of permit AOP-14-032.

Hazardous Most Stringent Emission Rate Determinations		
Date of Determination/ Permit #	HAC	Description/Emission limit
January 13, 2005 #AOP-04-027	formaldehyde	<p>Analytical testing confirmed formaldehyde/ammonia scavenging occurred during the paper making process. Maximum formaldehyde emissions from the standard coating were estimated to be 5 parts per million (ppm). Maximum formaldehyde emissions from the pigment coating were estimated to be 43 ppm. Formaldehyde emissions remained in excess of the 0.0067 pound per 8 hour Action Level for formaldehyde.</p> <p>The Agency determined HMSER for formaldehyde to be an emission limit of 65 pounds per year, correlating to an emission rate of 0.059 pounds per 8 hour period. The Permittee must notify the Agency in writing of any change in the formulation of formaldehyde-containing products utilized in the standard or pigment coating.</p>
	benzyl alcohol	<p>The Permittee discontinued use of products containing benzyl alcohol and a HMSER determination was not made. If products containing benzyl alcohol are used in the future, the Permittee must report (through annual registration) actual benzyl alcohol emissions using mass balance methods, assuming all benzyl alcohol contained in said products is emitted.</p>
July 25, 2007 #AOP-07-008	formaldehyde	<p>HMSER was reevaluated for the paper making process and the previous HMSER determination reestablished.</p>
May 31, 2013 #AOP-13-002	formaldehyde	<p>HMSER was reevaluated for the paper making process and the previous HMSER determination reestablished.</p> <p>HMSER for formaldehyde is an emission limit of 65 pounds per year, correlating to an emission rate of 0.059 pounds per 8 hour period. The Permittee must notify the Agency in writing of any change in the formulation of formaldehyde-containing products utilized in the standard or pigment coating.</p>

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) Stack heights: The exhaust gases from the two (2) Bigelow boilers shall be vented vertically through a stack which extends a minimum of sixty-five (65) feet above the stack base grade elevation. [10 V.S.A. §§556(c) and 556a(d)] [§5-406 of the *Regulations*] [AP-97-022]

### - Operational Limitations -

- (3) The No. 6 fuel oil burned at the Facility shall not exceed a maximum sulfur content of 2.0 percent by weight. Commencing on July 1, 2018, the sulfur content of No.6 residual fuel oil shall not exceed 0.5 percent by weight. [§5-221(1)(a) of the *Regulations*] [AP-97-022]
- (4) Bigelow Boilers Fuel Limit: The combined heat input to the two Bigelow boilers from the use of No.6 fuel oil, SVO and natural gas is limited to 412,350 MMBtu per rolling twelve (12) consecutive months. [§5-501(1) of the *Regulations*]
- (5) 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 the Bigelow boilers as well as all other applicable requirements of this regulation.
  - (a) 5-year tune-ups of the Bigelow boiler(s) as required by 40 *CFR* §63.11223(c). For boilers installed prior to June 4, 2010 the first tune-up is required by March 21, 2014. Subsequent tune-ups must be completed no later than 61 months after the prior tune-up. Each tune-up must be conducted while burning the type of fuel that provided the majority of the heat input to the boiler over the 12 months prior to the 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). The energy assessment must be completed by March 21, 2014. The Facility's energy assessment has been completed.

- (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 19<sup>th</sup>, 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 the two Bigelow Boilers were completed during July, 2013. The first subsequent tune-up is due no later than July 31<sup>st</sup>, 2018. The notification of the initial tune-up for the two Bigelow boilers has been submitted.
    - b. Notification of the completion of the energy assessment must be submitted no later than July 19, 2014. The energy assessment notification has been completed.
    - c. The notification(s) must be submitted electronically using the Compliance and Emissions Data Reporting Interface (CEDRI) that is accessed through EPA's Central Data Exchange (CDX) ([www.epa.gov/cdx](http://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 Notification of Compliance Status must be submitted to the Administrator at the appropriate address listed in § 63.13.
  - (iii) §63.11225(b): Periodic Compliance Certification:
    - a. By March 1 of each year following a boiler tune-up, prepare and submit an annual compliance certification report for the previous calendar year. This compliance certification may be submitted with the other annual certifications required in Condition (41) of this permit.
  - (iv) §63.11225(c): Recordkeeping Requirements:
    - a. As required in § 63.10(b)(2)(xiv), you must keep a copy of each notification and report that you submitted to comply with this subpart and all documentation supporting any Initial Notification or Notification of Compliance Status that you submitted.
    - b. Records must identify each boiler, the date of tune-up, the procedures followed for tune-up, and the manufacturer's specifications to which the boiler was tuned.
    - c. For each boiler required to conduct an energy assessment, you must keep a copy of the energy assessment report.

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

- (6) The Facility shall not cause, allow or permit the application, during any day, of coatings on a paper coating unit whose daily-weighted average of VOC content exceeds 2.9 pounds per gallon of coating (excluding water and exempt compounds), as applied, if VOC emissions from all paper coating units combined at the Facility equal or exceed fifteen (15) pounds per day. The VOC content of the coatings shall be determined in accordance with Method 24 of 40 *CFR* Part 60, Appendix A, 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. [10 *V.S.A.* §556(c) and §5-253.10 of the *Regulations*] [AP-97-022]
- (7) Diesel 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 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]
- (8) Diesel Engines: For stationary diesel engines that are subject to 40 *CFR* Part 60 Subpart IIII, the Permittee must:
- (a) Comply with the emission standards in §60.4204 and/or §60.4205 as applicable.
  - (b) As required in §60.4206, operate and maintain the engines according to the manufacturer's written instructions or procedures developed by the owner or operator that are approved by the engine manufacturer.
  - (c) As required in §60.4207, only Ultra Low Sulfur Diesel fuel with a maximum sulfur content not to exceed 0.0015% by weight (15 ppm) may be used in the affected diesel engines.
  - (d) The stationary emergency diesel engine(s) shall be equipped with a non-resettable hour meter
- [10 *V.S.A.* §556(c)] [§5-501 of the *Regulations*][40 *CFR* Part 60 Subpart IIII]
- (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. §§556(c) and 556a(d)] [§5-253.14 of the Regulations] [AP-97-022]

**- Emission Limitations -**

- (10) Annual emissions of formaldehyde from the Facility shall not exceed sixty-five (65) pounds per calendar year. Compliance with this limit shall be demonstrated using the equations and additional record keeping requirements specified in this Permit. [10 V.S.A. §§556(c) of the Regulations] [§5-261 of the Regulations] [AOP-04-027]
- (11) Total emissions of NO<sub>x</sub> from the drying oven on the lamination line and the two (2) Bigelow boilers combined shall not equal or exceed 100 tons per rolling twelve (12) consecutive month period. Compliance with this limit shall be demonstrated using the equations and additional record keeping requirements specified in this Permit. [10 V.S.A. §§556(c)] [§5-251 of the Regulations]
- (12) Emissions of particulate matter ("PM") from the Facility boilers, comprised of the two Bigelow boilers (38 MMBTU/hr each), shall not exceed the following limits:

<b>Pollutant Emission Limitations</b>		
<b>Boiler</b>	<b>lbs/MMBTU</b>	<b>lbs/hour</b>
Bigelow 38 MMBTU/hr boiler	0.27	10.3
Bigelow 38 MMBTU/hr boiler	0.27	10.3

Any emission testing conducted to demonstrate compliance with the above emission limits shall be performed in accordance with 40 CFR Part 60, Appendix A, Reference Method 5. [10 V.S.A. §§556(c) and 556a(d)] [§5-404 of the Regulations] [AP-97-022a]

- (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 [Specific Installations prior to April 30, 1970]: Emissions of visible air contaminants from the two (2) Bigelow boilers 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(1), 5-211(3) and 5-404 of the *Regulations*]

- (15) Volatile Organic Compounds: Emissions of volatile organic compounds from the Facility shall not equal or exceed fifty (50) tons per year based on any rolling twelve (12) consecutive calendar month period. [§5-502 of the *Regulations*]
- (16) 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 year based on any rolling twelve (12) consecutive calendar month period. [40 *CFR* Part 63]
- (17) 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*]
- (18) Fugitive Emissions: The Permittee shall take reasonable precautions at all times to control and minimize emissions of fugitive volatile organic compounds from the operations at the Facility. This shall include but not be limited to the following:
- (a) Coating and solvent containers containing VOC materials shall be covered when not in use;
  - (b) Solvent containing VOC materials used for gun/line cleaning shall be collected into a closed container, not sprayed in a manner which would allow the VOCs to be emitted into the ambient air, and all containers associated with the cleaning shall be covered when not in use.

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

- (19) 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 -**

- (20) Every five (5) years, the Permittee shall perform emission testing on the Bigelow boilers for nitrogen oxides (NO<sub>x</sub>), particulate matter (PM), and combustion efficiency.
- (a) The fuel used for this emission testing will be the same fuel or fuel blend (the 'predominant fuel') that provided the majority of the heat input to the boiler(s) over the 12 months prior to the emission test. During this 12 month period, if the predominant fuel is a blend of No.6 fuel oil and SVO, then the emission test will be conducted using a representative blend of these fuel oils.
  - (b) If SVO is a portion of the fuel used during the emission testing, then the Permittee shall also test the vegetable oil being burned for nitrogen content, sulfur content, ash content, and heat content.
  - (c) The first test was first performed on 10/17/2007 and a second set of tests was performed on 12/5/2012 and 12/6/2012; the next 5-year interval test is due on or before 10/17/2017.
  - (d) As currently configured, the Bigelow boilers share a common exhaust stack, and there is no location in the breeching acceptable for testing PM emissions or the mass emission rate of NO<sub>x</sub> from either boiler individually. If both boilers are operating during the emission testing, the results of testing performed in the common exhaust stack shall be considered representative of emissions from each boiler.
  - (e) Emission testing shall be performed in order to demonstrate compliance with the emission limitations specified in Condition (11) for NO<sub>x</sub> emissions and Condition (12) for PM emissions.
  - (f) If both boilers are operating during the emission testing and the sampling is conducted at a point where the exhaust from the boilers is combined, then the effective PM limits are 0.27 lb/MMBtu and 20.6 lb/hr for the combined exhaust.
  - (g) 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) and 5-405(1) of the *Regulations*] [AOP-07-008]

- (21) Boiler combustion efficiency: At least once every 6 months the Permittee shall perform combustion efficiency testing of the two (2) Bigelow boilers by measuring the concentrations of carbon dioxide ("CO<sub>2</sub>") and carbon monoxide ("CO") in the exhaust gases. For the purposes of this Permit, combustion efficiency is defined as the concentration of CO<sub>2</sub> in the boiler exhaust gas divided by the sum of the concentrations of CO<sub>2</sub> and CO. 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. 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. 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 on a dry basis, and  
 CO = % by volume of carbon monoxide in the flue gas on a dry basis.

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

- (22) Boiler combustion efficiency: The concentration of CO<sub>2</sub> in the exhaust gas may be determined indirectly by measuring the concentration of oxygen ("O<sub>2</sub>") in the exhaust gas and using the following formula:

$$CO_2 = 100 \times \frac{F_c}{F} \times \frac{(20.9 - O_2)}{20.9}$$

Where:

For fuel oil:  
 F<sub>c</sub> = 1,420 standard cubic feet of CO<sub>2</sub> per MMBTU; and  
 F = 9,190 dry standard cubic feet per MMBTU.

For natural gas:  
 F<sub>c</sub> = 1,040 standard cubic feet of CO<sub>2</sub> per MMBTU; and  
 F = 8,710 dry standard cubic feet per MMBTU.

[§§5-404(1) and 5-405(1) of the *Regulations*]

- (23) Boiler O&M: The Permittee shall maintain an operation and maintenance (O&M) plan for its 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 operation and maintenance plan shall include, but not be limited to:
- (a) identification of a combustion efficiency trigger level, which will trigger action under said plan;
  - (b) the procedures to be followed to increase combustion efficiency whenever the combustion efficiency is determined to be less than the trigger level;
  - (c) when a boiler is switched from firing natural gas to fuel oil or SVO or a fuel oil/SVO blend and operates on the oil fuel for more than 7 consecutive days, the Permittee shall test the boiler's combustion efficiency while firing the oil fuel. This test shall be conducted within 7 days of initially firing the oil fuel.
  - (d) descriptions of routine maintenance and inspection procedures;

- (g)(e) 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
- (h)(f) provisions for calibration and maintenance of any testing instruments and/or equipment used to measure the concentrations of CO<sub>2</sub> 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 an exceedance of the opacity and particulate emission limits set forth in this Permit. Said operation and maintenance 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 this plan at the Agency's request or on its own motion to reflect equipment or operational changes. [10 V.S.A. §§556(c) and 556a(d)] [§5-405(1) of the *Regulations*] [AOP-95-174]

**- Record Keeping and Reporting -**

- (24) The Permittee shall install, calibrate, maintain, and operate fuel consumption meters on each boiler. [§5-405(1) of the *Regulations*] [AOP-95-174]
- (25) Records of Combustion Efficiency Testing: The Permittee shall maintain records of the results of the combustion efficiency testing conducted on the respective boilers. [10 V.S.A. §§556(c) and 556a(d)] [§§5-405(1) and 5-1015(a)(3) and (4) of the *Regulations*] [AOP-95-174]
- (26) Records of Fuel Use: the Permittee shall maintain records of the total quantity of:
- (a) No. 6 fuel oil consumed in the two Bigelow boilers, in gallons, each month. At the beginning of each month, the Permittee shall calculate the total quantity of No. 6 fuel oil consumed in the boilers, in gallons, during the previous twelve (12) consecutive month period.
  - (b) Straight vegetable oil (SVO) consumed in the two Bigelow boilers, in gallons, each month. At the beginning of each month, the Permittee shall calculate the total quantity of SVO consumed in the boilers, in gallons, during the previous twelve (12) consecutive month period.
  - (c) Natural gas consumed in the drying oven on the lamination line in standard cubic feet, each month.
  - (d) Natural gas consumed in the two Bigelow boilers, in standard cubic feet, each month.
  - (e) At the beginning of each month, the Permittee shall calculate the total quantity of natural gas consumed in the boilers and the drying oven, in standard cubic feet, during the previous twelve (12) consecutive month period

[10 V.S.A. §§556(c) and 556a(d)] [§5-405(1) of the *Regulations*] [AP-97-022]

- (27) Records of No. 6 Fuel Oil Certifications: The Permittee shall obtain from the fuel supplier, for each shipment of No. 6 fuel oil received at the Facility, a certification or invoice stating the sulfur content and the nitrogen 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, and to the nitrogen content of the fuel oil in percent nitrogen, by weight. [10 V.S.A. §§556(c) and 556a(d)] [§5-405(1) of the *Regulations*]
- (28) Records of Straight Vegetable Oil Properties: During each 6 month period in which the Permittee burns greater than 15,000 gallons of straight vegetable oil, the Permittee shall have a representative sample of the straight vegetable oil fuel used at the Facility analyzed for the following properties: the sulfur content in percent sulfur by weight, the nitrogen content in percent nitrogen, by weight, the ash content in percent by weight, the specific gravity and the heat value in British Thermal units per pound. The analysis may be from a sample collected at the Facility or provided by the supplier as long as it is representative of the vegetable oil provided to the Facility. [10 V.S.A. §§556(c) and 556a(d)] [§5-405(1) of the *Regulations*]
- (29) Each month the Permittee shall compute the total fuel heat input to the Bigelow boilers for the previous 12 month period using the following equation :

$$\text{Heat Input} = (\text{Total No.6 oil gallons}/12 \text{ months}) * (\text{HHV No.6 oil}) \\ + (\text{Total SVO gallons}/12 \text{ months}) * (\text{HHV}_{\text{ASVO}}) \\ + (\text{total natural gas MMCF}/12 \text{ months}) * (\text{HHV natural gas})$$

Where:

HHV No.6 oil = 0.15 MMBtu/gallon

HHV<sub>ASVO</sub> = 0.13 MMBtu/gallon, or as otherwise required or approved in writing by the Agency.

HHV natural gas = 1020 Btu/standard cubic foot

[10 V.S.A. §§556(c) and 556a(d)]

- (30) Each month the Permittee shall compute the weighted average nitrogen fuel content of the No. 6 fuel oil fired in the Bigelow boilers using the following equation:

$$\frac{Q_f N_f + \sum_{i=1}^n Q_{d_i} N_{d_i}}{Q_f + \sum_{i=1}^n Q_{d_i}} = N_{\text{No.6}}$$

Where:

Q<sub>f</sub> = quantity, in gallons, of No. 6 fuel oil remaining in fuel tank on the first of the month;

N<sub>f</sub> = percent nitrogen content, by weight, of No. 6 fuel oil remaining in fuel tank on the first of each month;

Q<sub>d</sub> = quantity, in gallons, of No. 6 fuel oil received during each delivery (*i*) made during the month;

$N_d$  = percent nitrogen content, by weight, on No. 6 fuel oil received during each delivery ( $i$ ) during the month.

In the event that a fuel supplier does not state the nitrogen content of a specific delivery of No. 6 fuel oil, the Permittee shall assume that the No. 6 fuel oil contains 0.5% nitrogen, by weight. [10 V.S.A. §§556(c) and 556a(d)] [AOP-95-174]

- (31) In order to maintain emissions of nitrogen oxides ( $NO_x$ ) below the one hundred (100) tons per year threshold of §5-251(3) of the *Regulations*, the Permittee shall not burn fuel in the drying oven on the lamination line and all Facility boilers combined in quantities greater than the following limit during any rolling twelve (12) consecutive calendar month period:

$$[((20+104.39*N_{SVO})*X_{SVO})+((20+104.39*N_{No.6})*X_{No.6})+(0.1*X_{NG})] * [5*10^{-7}] < 100 \text{ tons}$$

where:

$X_{SVO}$  = total monthly straight vegetable oil consumption, in gallons,

$X_{No.6}$  = total monthly No. 6 fuel oil consumption, in gallons,

$X_{NG}$  = total monthly natural gas consumption, in standard cubic feet,

$N_{SVO}$  = the highest value for nitrogen content of the straight vegetable oil based on the test data required by Condition ~~(28)~~(29) during the 12 month period. In the event test data has not yet been obtained under Condition ~~(28)~~(29) the nitrogen content shall be assumed to be 0.153. In the event new test data is not obtained during the 12 month period, the last value used shall continue to be used.

$N_{No.6}$  = monthly weighted average nitrogen content of the No. 6 fuel oil as determined by condition ~~(30)~~(34) above.

If fuel contains 0.5% nitrogen by weight,  $N = 0.5$

[10 V.S.A. §§556(c) and 556a(d)] [§5-231(3) of the *Regulations*]

- (32) The Permittee shall maintain annual records of the type and quantity of the adhesives used on the laminating line. This information shall be used to estimate the emissions of hazardous air contaminants from the use of these adhesives. This data shall be included in the information submitted as part of the Facility's annual registration as required in Condition (42). [§5-405(1) of the *Regulations*]
- (33) The Permittee shall maintain monthly records describing each paper coating used at the Facility. The records shall include the total gallons of each paper coating, the density of each paper coating, the volatile organic compound content (expressed as a weight percentage and a volume percentage) of each paper coating, and the solids content (expressed as a weight percentage) of each paper coating. All information used to derive the above-listed items shall be kept as part of the records. These usage records shall be kept available, for inspection or submittal, for five years from the date of the record. [10 V.S.A. §§556(c) and 556a(d)] [AOP-95-174]

- (34) The Permittee shall maintain monthly records of the quantities of Rhoplex HA-12, Michem, and Tamol 165A used in the standard and pigment coating, the quantity of standard and pigment coating produced, and the computed formaldehyde emissions from these coatings, in pounds. By February 1st of each year, the Permittee shall calculate and report formaldehyde emissions during the previous calendar year using the formulas below:

Standard Coating:

$$Fa_{sc} = \frac{5 \times C_s}{1 \times 10^6} \quad \text{where:}$$

$Fa_{sc}$  = Annual Formaldehyde Emissions, in lbs/year, from the standard clear coating.

$C_s$  = Annual Standard Coating Usage, in lbs/year

Pigment Coating:

$$Fa_{pc} = \frac{43 \times C_p}{1 \times 10^6} \quad \text{where:}$$

$Fa_{pc}$  = Annual Formaldehyde Emissions, in lbs/year, from the standard pigment coating.

$C_p$  = Annual Pigment Coating Usage, in lbs/year

[§5-405(1) of the *Regulations*]

- (35) 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*]

- (36) 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*]
- (37) Notification: The Permittee shall notify the Agency in writing of the date of initial start-up of the laminating machine's drying oven within fifteen (15) days after such date. [§5-402 of the *Regulations*]

- (38) 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) 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*]
- (40) Semi-Annual Compliance Reports: Within thirty (30) days after July 1 and January 1 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) the calendar dates covered in the reporting period;
  - (b) a summary of the periodic combustion efficiency calculations required by this Permit;
  - (c) a summary of the sulfur content (weight percent) of the No. 6 fuel oil fired in the Bigelow boilers during the reporting period, reasons for any noncompliance with the emission standards, and a description of the corrective action taken;
  - (d) a summary of the fuel usage records required by this Permit;
  - (e) a summary of the rolling twelve consecutive month total fuel heat input to the Bigelow boilers.
  - (f) a summary of the rolling twelve consecutive month total NO<sub>x</sub> emissions, including the calculations required by this Permit;
  - (g) records of fuel supplier certifications as required by this Permit;
  - (h) a certified statement signed by a responsible official that the records of fuel supplier certifications submitted represent all of the fuel combusted in the Bigelow boilers during the semi-annual reporting period;
  - (i) a summary of the paper coating and product usage records required by this Permit;

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

(41) **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 and 5-1015(a)(11) of the *Regulations*]

(42) **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*]

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

Air Quality & Climate Division  
Department of Environmental Conservation  
Agency of Natural Resources  
Davis 2  
One National Life Drive  
Montpelier, Vermont 05620-3802

[§5-402 of the *Regulations*]

(44) 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 of the *Regulations*]

**- Standard Permit Conditions -**

- (45) 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)]
- (46) Approval to construct or modify under this Permit shall become invalid if construction or modification is not commenced within eighteen (18) months after issuance of this Permit, if construction or modification is discontinued for a period of eighteen (18) months or more, or if construction is not substantially completed within a reasonable time. The Agency may extend any one of these periods upon a satisfactory showing that an extension is justified. The term "commence" as applied to the proposed construction or modification of a source means that the Permittee either has:
- (a) Begun, or caused to begin, a continuous program of actual on-site construction or modification of the source, to be completed within a reasonable time; or
  - (b) Entered into binding agreements or contractual obligations, which cannot be cancelled or modified without substantial loss to the Permittee, to undertake a continuous program of actual on-site construction or modification of the source to be completed within a reasonable time.

[10 V.S.A. §556(c)] [§5-501 of the *Regulations*]

- (47) 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*]

- (48) 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*]

- (49) 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)]
- (50) 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*]
- (51) 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*]

- (52) 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)]
- (53) 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*]
- (54) 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)]
- (55) 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*]
- (56) 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)]
- (57) 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)]
- (58) 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*]

- (59) 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](http://www.psb.vermont.gov). The address for the Public Service Board is 112 State Street, Montpelier, Vermont, 05620-2701 (Tel. # 802-828-2358).
- (60) 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](http://www.vermontjudiciary.org). The address for the Environmental Court is 2418 Airport Road, Suite 1, Barre, VT 05641 (Tel. # 802-828-1660).
- (61) Conditions (2), (4), (8), (26), (28) and (29) 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*]

- (62) 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 23<sup>rd</sup> day of December, 2014.

Agency of Natural Resources

David K. Mears, Commissioner  
Department of Environmental Conservation

By:   
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Doug Elliott, Acting Director  
Air Quality & Climate Division

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

AGENCY OF NATURAL RESOURCES

December 23, 2014

Bob Murphy  
FiberMark North America, Inc.  
161 Wellington Road  
Brattleboro, VT 05301

RE: Final Title V Air Pollution Control Permit to Construct and Operate (#AOP-14-032)  
FiberMark North America, Inc.

Dear Mr. Murphy:

The Vermont Agency of Natural Resources, Department of Environmental Conservation, Air Quality & Climate Division (Agency) has completed its review of FiberMark North America, Inc.'s application for the proposed installation and operation of a natural gas fired drying oven for their roll-to-roll laminating machine and renewal of the Permit to Operate for the Facility located on Wellington Road in Brattleboro, 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 has combined approval for the Air Pollution Control Permit to Construct with the approval for 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 supercedes 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.

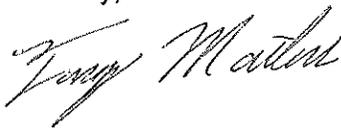
Please review this Permit carefully to ensure that you are currently, and continue to be, in compliance with all the requirements contained in this Permit. There are a few key points included in this permit or that you may otherwise be subject to that I would like to highlight for your convenience:



- Fuel oil sulfur: Consistent with New England regional efforts, Vermont has adopted regulations that will be lowering the allowed sulfur content of fuels oils between the years 2014 and 2018. Commencing on 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.

If you have any questions or comments, please feel free to contact me by phone at (802) 272-3445, by email at [tony.mathis@state.vt.us](mailto:tony.mathis@state.vt.us), or in writing at the above address.

Sincerely,



Tony Mathis  
Engineering Services Section  
Air Quality and Climate Division

tcm

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