Appendix D: Isovolta

Operating Permit RACT provisions

AOP-14-037

Issued on September 20, 2017

Only portions highlighted are intended for inclusion in the SIP.

Strikeout text is not intended for inclusion in SIP.

State of Vermont Agency of Natural Resources Department of Environmental Conservation



Air Quality & Climate Division Montpelier, Vermont

AIR POLLUTION CONTROL PERMIT TO CONSTRUCT AND OPERATE

Date Permit Issued: September 20, 2017

Owner/Operator: Isovolta, Inc.

P.O. Box 848

Rutland, Vermont 05701-0848

Source: Isovolta, Inc.

Electrical Insulation Manufacturing Facility

Windcrest Road P.O. Box 848

Rutland, Vermont 05701-0848

FINDINGS OF FACT

(A) FACILITY DESCRIPTION

Isovolta, Inc. (also referred to herein as "Permittee") owns and operates an insulating mica paper manufacturing facility off Windcrest Road in the town of Rutland, Vermont (also referred to herein as "Facility").

Since the issuance of the last Permit to Operate, the Permittee has replaced No. 6 fuel oil fuel system for the Cleaver Brooks boiler with a propane fuel system. The boiler switched to propane during January 2014. As authorized in permit AOP 09 047, the Permittee replaced the regenerative thermal oxidizer (RTO) on the Midland Ross roll coater during July 2011. Both changes resulted in a reduction of emissions; this permitting action is to incorporate these modifications into the operating permit.

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

Equipment Specifications				
Equipment/Make/Model	capacity/size MMBTU/hr ¹	fuel type	date of installation	
Midland Ross roll coating machine	6.3 MMBtu/hr 5,000 cfm ³	Propane	Unknown 4	
Midland Ross regenerative thermal oxidizer - Adwest Technologies RETOX 5.0 RTO95	1.44 MMBtu/hr	Propane and VOC	July 2011	
Wolverine roll coating machine	5.0 MMBtu/hr 3,000 cfm	Propane	1980	
Wolverine thermal oxidizer - Combustion Engineering Cor Pak unit	5.0 MMBtu/hr	Propane and VOC	1980	
R&D roll coating machine	0.8 MMBtu/h 1,500 cfm	Propane	Unknown	
Casso Solar paper machine	151.2 kW²	Electric	1952	
Industrial Clean Air fabric filter (192 bags, 3,264 total sq.ft. cloth; air to cloth 3.06)	10,000 cfm	n/a	Unknown	
Cleaver Brooks CB600X-300 boiler	12.5 MMBtu/hr Propane burner rated @ 7.99 MMBtu/hr	Propane	1973 Propane as of 2014	
Bartlett Snow kiln	1 MMBtu/hr	Propane	1952	
Acrylator oven	0.90 MMBtu/hr	Propane	Unknown	
Resin mixing room	-	-	Unknown	

⁴ MMBtu/hr - Million British Thermal Units per hour maximum rated heat input.

(B) FACILITY CLASSIFICATION

² kW – kiloWatt

³-cfm – Cubic feet per minute.

⁴ Equipment with an unknown installation date will be treated as if they were installed after 4/30/1970 for purposes of visible emission standards.

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 (11) [Manufacturing, processing and application of chemicals, including the processing or application of plastics, rubbers or resins] 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 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		
January 1, 1995	Original Agency Administrative Order for VOC RACT at the Facility requiring 81% overall reduction in VOC emissions by weight.		
June 2, 1995	Notice of Alleged Violation for failure to complete VOC capture efficiency testing or to submit a capture efficiency demonstration.		
August 14, 1995	Revised Administrative Order for VOC RACT allowing operation of Phase II coating line until November 6, 1995.		
January 28, 2000	Notice of Alleged Violation for failure of the Wolverine coating machine to pass capture efficiency test. The coater was subsequently retested on March 2, 2000 and passed.		
January 6, 2006	OP-95-040 - Initial Permit to Operate approval incorporating the VOC RACT Administrative Order requirements.		
February 11, 2011	OP-09-047 – Construction Permit approval to authorize replacing the Midland RTO and to allow the use of water based resins on the Wolverine coater while not operating the Wolverine thermal oxidizer.		

(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 change of fuel type from No.6 fuel oil to Liquefied Petroleum Gas (LPG, also known as propane) for the boiler 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 existing Permit to Operate must also be amended to incorporate any modifications to the Facility. 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 the ten (10) tpy combined threshold for applicability with Subchapter X of the *Regulations*, but each pollutant is less than the one-hundred (100) tpy single pollutant threshold (50 tpy for VOC) 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 "Subchapter X Major Source."

In accordance with 10 VSA §556(e) the Agency has combined the previous 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:

Allowable Air Contaminant Emissions (tons/year) ¹					
PM/PM ₁₀ /PM _{2.5}	co	NO _*	SO ₂	VOCs	HAPs ²
8.5	10.2	17.7	1.4	<u><50</u>	≤10/25

⁴ PM/PM₁₀/PM_{2.6}—total particulate matter, total particulate matter of 10 micrometers in size or smaller and total particulate matter of 2.5 micrometers in size or smaller, respectively (unless otherwise specified, all PM is assumed to be PM_{2.5}); 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.

(E) REVIEW OF CRITERIA POLLUTANT EMISSIONS FOR THE PERMIT TO CONSTRUCT

(a) New Source Review Designation

The Facility, prior to the construction of the proposed modification, is designated as a non-major stationary source of air contaminants since it does not have 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 major 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 major increase in emissions. Consequently,

For purposes of designation the Facility as a major or minor source of federal hazardous air pollutants (HAPs), the emissions of individual HAPs from the Facility are each <10 tpy and emissions of total HAPs combined are <25 tpy. Actual total combined HAPs from the Facility are estimated at <1 tpy</p>

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 criteria pollutants 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 for criteria pollutants is performed to demonstrate whether or not a proposed project will cause or contribute to violations of the national ambient air quality standards and/or significantly deteriorate existing air quality for the regulated criteria pollutants.

Based on the level of emissions from this Facility, it is not expected to cause or contribute to a violation of any national 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 OF CRITERIA POLLUTANT EMISSIONS 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(2) - Prohibition of Visible Air Contaminants, Installations Constructed Subsequent to April 30, 1970.

Section 5-221(1) - Prohibition of Potentially Polluting Materials in Fuel, Sulfur Limitation in Fuel.

Section 5-231(1) Prohibition of Particulate Matter; Industrial Process Emissions.

Section 5-231(3) - Prohibition of Particulate Matter; Combustion Contaminants.

Section 5-231(4) Prohibition of Particulate Matter; Fugitive Particulate Matter.

Section 5-241 - Prohibition of Nuisance and Odor.

Section 5-253.14 - Control of Volatile Organic Compounds from Solvent Metal Cleaning.

Section 5-253.20 - Other Sources That Emit Volatile Organic Compounds.

Section 5-261 — Control of Hazardous Air Contaminants.

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 issued on February 11, 2011 (*OP-09-047). 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-14-037).

(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 with a heat input rating of 10 MMBTU/hr or greater manufactured or modified after June 9, 1989. Units larger than 30 MMBTU per hour installed after February 27, 2005 are subject to additional particulate matter requirements.

The 12.5 MMBtu/hour Cleaver Brooks boiler was manufactured prior to June 9, 1989, therefore the Facility is not subject to this regulation.

40 CFR Part 63, Subpart JJJJJJ 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.

Since Vermont has not taken delegation of this federal regulation, the U.S. EPA is the implementing authority and is responsible for determining applicability of this regulation. Subpart JJJJJ is anticipated to apply to the Cleaver Brooks boiler at the Facility. Since the Facility is not a major source of HAPs, the Facility is not subject to Subpart DDDDD.

(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*.

(G) CONTROL OF HAZARDOUS AIR CONTAMINTANTS

Pursuant to §5-261 of the Regulations, any stationary source subject to the rule¹ with current or proposed actual emissions of a hazardous air contaminant (HAC) equal to or greater than the respective Action Level (found in Appendix C of the Regulations) shall be subject to the Regulation and shall achieve the Hazardous Most Stringent Emission Rate (HMSER) for the respective HAC. HMSER is defined as a rate of emissions which the Secretary, on a case by case basis, determines is achievable for a stationary source based on the lowest emission rate achieved in practice by such a category of source and considering economic impact and cost. HMSER may be achieved through application of pollution control equipment, production processes or techniques, equipment design, work practices, chemical substitution, or innovative pollution control techniques.

Based on information provided by the Permittee, the Agency does not anticipate the Facility to have regulated emissions of any HAC in excess of an Action Level. Therefore, the Facility is not being reviewed pursuant to §5-261 of the *Regulations* at this time.

¹ APCR §5-261(1)(c)(ii) provides that solid fuel burning equipment (not including incinerators) installed or constructed prior to January 1, 1993, and all fuel burning equipment which combust virgin liquid or gaseous fuel shall not be subject to the requirements of §5-261.

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) The Permittee shall operate and maintain emissions capture and incineration control devices on both the Wolverine and the Midland-Ross process lines. The emissions capture and incineration control devices shall be utilized at all times when the above referenced process lines are in operation. [RACT §5-253.20 of the Regulations. Administrative Order dated 14 August 1995]
- (3) The Permittee shall operate the incineration control devices at a minimum temperature of 760° Celsius (1400° Fahrenheit) while the respective process lines are in operation. Furthermore, the Facility shall not process material in the process lines until such time as the respective incineration control device has reached a minimum temperature of 760° Celsius (1400° Fahrenheit). [RACT §5-253.20 of the Regulations. Administrative Order dated 14 August 1995]
- (4) Notwithstanding Conditions (2), (3) and (8) of this Permit, the Wolverine incineration control device is not required to be operated when the Wolverine process line is running exclusively the "Film Face Tape" product to which is being applied a coating with a total VOC content, as applied, of not greater than 0.1% by weight. [10 V.S.A. §556a(d)] [Operating Permit Application #OP-09-047]
- (5) The Permittee shall control emissions from the raw dry mica handling operations, including the feed hopper loading and the calciner inlet and outlet, by installing and operating a fabric filter dust collection system. All elements of this air pollution control system shall be maintained in good working order at all times and shall be operated in accordance with the manufacturer's operation and maintenance recommendations. The air pollution control system shall be in operation whenever the respective emission source is in operation. [10 V.S.A. §556a(d)] [§5-1015(a)(1), (3) and (4) of the Regulations]
- (6) The fabric filter collector shall be equipped with a pressure drop measurement device which continuously measures and displays the pressure drop across the fabric filter

collector (e.g., manometer or magnehelic). The Permittee shall use the pressure drop measurement device to maintain the pressure drop across the fabric filter within acceptable ranges as specified by the manufacturer. [10 V.S.A. §§556(c) and 556a(d)] [§5-1015(a)(1), (3) and (4) of the Regulations]

(7) <u>Stack heights</u>: The exhaust gases from the following emission sources shall be vented vertically through a stack(s) of the configuration noted below. Where stack heights are noted in Findings of Fact A such stacks shall be configured accordingly. The stack(s) 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.

Stack Height and Configuration				
Emission source	Stack Dimensions	Minimum stack height (ft) Above roof line		
Midland-Ross coater controlled with AdWest RTO	21.5 inch diameter	4		
Wolverine coater controlled with Wolverine thermal oxidizer	1.17 square feet	4		

For all other non-fugitive emission points at the Facility, the Agency recommends that they each be exhausted vertically through a stack(s) which extend a minimum of four (4) feet above the roof where the stack penetrates the roof and that they 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. The Agency may require the Permittee to increase the stack height, remove a rain cap, or conduct a dispersion analysis to verify compliance with ambient air quality standards for any stack at the Facility if, in the judgment of the Agency, adequate dispersion cannot be maintained at the current stack configuration. Adequacy may in part be based on the actual emission rate of air contaminants, the characteristics of the current stack configuration, or inspections of the Facility that indicate poor dispersion or that confirm significant visible emissions or nuisance or odor beyond the property line. [10 V.S.A. §§556(c) and 556a(d)] [§5-406 of the Regulations]

- Emission Limitations -

- (8) The Permittee shall achieve an overall reduction in uncontrolled VOC emissions of at least 81% by weight from both the Wolverine and Midland-Ross lines. [RACT §5-253.20 of the Regulations. Administrative Order dated 14 August 1995]
- (9) Particulate Matter [Industrial Clean Air fabric filter]: Emissions of particulate matter from the fabric filter dust collection system shall at no time exceed the emission limitations in the table below:

Fabric Filter Collector PM/PM10 Emission Limitations			
Unit	Emission Limitations		
	acfm ⁴	gr/dscf ²	lbs/hour ³

Industrial Clean Air Fabric Filter	10,000	0.01	0.86
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⁴ acfm equals actual cubic foot of undiluted exhaust gas per minute.

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 or an equivalent method approved in writing by the Agency. [10 V.S.A. §556a(d)] [§§5-404, 5-231(1) and 5-261(2) of the Regulations]

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

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

(11) <u>Visible Emissions [Facility Wide]</u>: 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. [10 V.S.A. §§556(c) and 556a(d)] [§§5-211(2), 5-211(3) and 5-404 of the Regulations]

- (12) <u>Volatile Organic Compounds</u>: Emissions of volatile organic compounds from the Facility shall not equal or exceed fifty (50) tons per calendar year. [10 V.S.A. §§556(c) and 556a(d)] [§5-502 of the Regulations]
- (13) <u>Hazardous Air Pollutants</u>: 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. [40 CFR Part 63]
- (14) <u>Hazardous Air Contaminants</u>: 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(2) of the *Regulations*. [10 V.S.A. §§556(c) and 556a(d)] [§5-261 of the *Regulations*]
- (15) <u>Fugitive Emissions</u>: 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 the following:
 - (a) Coating and solvent containers containing VOC materials shall be covered when not in use.
 - (b) The Midland-Ross and Wolverine coating lines shall maintain a capture and Control efficiency of 81% or greater.

²-gr/dscf equals grains of pollutant emitted per dry std cubic foot of undiluted exhaust gas.

³ lbs/hour equals pounds of pollutant emitted per hour.

[10 V.S.A. §556a(d)] [§5-231(4) of the *Regulations*] [RACT §5-253.20 of the *Regulations*. Administrative Order dated 14 August 1995]

(16) 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. [10 V.S.A. §§556(e) and 556a(d)] [§5 241(1) of the Regulations]

- Continuous Temperature Monitoring System (CTMS) -

- (17) The Permittee shall continuously monitor and record the exhaust gas temperature at the outlet of each incineration control device. [RACT §5-253.20 of the *Regulations*. Administrative Order dated 14 August 1995]
- (18) The Permittee shall configure the Wolverine and the Midland-Ross coating lines and their respective incineration control devices with a temperature controlled start-up/shut-down interlock system (or feed-back loop) to insure that each coating line will not operate if its respective control device is operating below 1400°F, except for the Wolverine coating line when it is running the "Film Face Tape" product in accordance with condition (4) above. [RACT §5-253.20 of the Regulations. Administrative Order dated 4 January 1995]
- (19) The Permittee shall operate and maintain each CTMS in accordance with the following:
 - (a) Each CTMS must record valid data during all source operating times except for periods of operation in accordance with condition (4) above, periods of established quality assurance and quality control procedures, preventative maintenance, or unavoidable malfunction. The CTMS must record valid data for at least 90% of the source operating time, excluding operation in accordance with condition (4) above, within any quarter of the calendar year.
 - (b) The Permittee shall maintain and implement a Quality Assurance (QA) Plan for the monitoring and recording systems which documents operations pursuant to the requirements of the CTMS. The QA plan shall specify the equipment, monitoring procedures, calibration, quarterly auditing and reporting procedures, and data recording systems to be used to demonstrate compliance with the January 4, 1995 RACT Administrative Order. The Permittee shall review the QA Plan and all data generated by its implementation at least once each year. The Permittee shall revise and update the plan as necessary, based on the results of this annual review, or upon the Agency's request. The Permittee shall notify the Agency in writing of the results of each annual review.
 - (c) The Permittee shall submit a summary monitoring report for each calendar quarter, within thirty (30) days after the close of the quarter, to the Agency. The format and content of the quarterly report shall be identified in the QA Plan.
 - (d) The Permittee shall conduct a functional integrity check to verify the performance of each start-up/shut-down interlock system. This check shall be performed annually. The procedure used must be acceptable to the Agency and identified in the QA Plan. The results of each annual check shall be included with the quarterly

- report submitted for the quarter in which the integrity check was performed.
- (e) All temperature data shall be recorded in degrees Fahrenheit.
- (f) The Permittee shall maintain a file of all information reported in the quarterly summaries and all raw data collected by the monitoring systems for at least five (5) years from the date of collection of such data or submission of such summaries. All data records for the monitoring systems shall be marked to show the times of both start-up and shut-down of the incineration systems and the process lines.

[RACT §5-253.20 of the Regulations. Administrative Order dated 14 August 1995]

- Compliance Testing and Monitoring -

Operation and Maintenance Plan [Industrial Clean Air fabric filter]: The Permittee shall continue to operate and maintain the Industrial Clean Air fabric filter in accordance with the operation and maintenance plan (O&M Plan) that was developed by the Permittee for permit OP 09 047. The purpose of said O&M Plan shall be to ensure the proper operation and maintenance of the fabric filter dust collection system in order to ensure continuous compliance with the respective conditions and emission limits of this Permit. The O&M Plan shall include, but not be limited to, a description of routine maintenance and inspection procedures, provisions for maintaining records of such maintenance and inspections as well as findings of those inspections and any corrective actions which were taken. 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 -

- (21) Records of Fuel Use: The Permittee shall maintain records of the total quantity of LPG consumed at the facility, in gallons, each month. At the end of each calendar year the Permittee shall calculate the total LPG usage, in gallons. [10 V.S.A. §556a(d)] [§5-405(1) of the Regulations]
- (22) The Permittee shall maintain records of the total annual quantity of all raw materials used at the Facility and their respective VOC, acetone, HAP, and HAC contents. At the end of each calendar year, the Permittee shall calculate the resultant emissions of VOCs, acetone, HAPs, and HACs and verify that emissions after any applicable air pollution control equipment are below the limits specified by this Permit. [§5-405 of the Regulations]
- (23) The Permittee shall maintain records of operation when the Wolverine process line is running exclusively the "Film Face Tape" product in accordance with Condition (4) above, noting the start and stop times so that compliance with the requirement to operate the Wolverine incineration control device at all other times of operation can be demonstrated.

 [10 V.S.A. §556a(d)] [§5-405(1) of the Regulations]
- (24) All records shall be retained for a minimum period of five (5) years from the date of record and shall be made available to the Agency upon request. [§§5-402(1), 5-405(1) and 5-1015(a)(7) of the Regulations]

- (25) Compliance Certification: By February 1st of each year, the Permittee shall submit an annual certification of compliance for the previous calendar year, concurrent with the annual registration data submitted to the Agency, which ascertains and identifies the compliance status of the Facility with respect to:
 - (a) Emissions of VOCs from the Facility are less than fifty (50) tons per year;
 - (b) 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:
 - (c) 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.

[§5-402(1) of the Regulations]

- (26) 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. [10 V.S.A. §§556(c) and 556a(d)] [§§5-402 and 5-1015(a)(6) of the Regulations]
- (27) 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) and 556a(d)] [§§5 402 and 5 501 of the Regulations]

- (28) 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. [10 V.S.A. §§556(c) and 556a(d)] [Subchapter VIII §§5-802, 5-803, 5-807, 5-808 of the Regulations]
- (29) All records, notifications and reports 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

[10 V.S.A. §§556(c) and 556a(d)] [§5-402 of the Regulations]

(30) 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

[10 V.S.A. §§556(c) and 556a(d)] [§5-402 of the Regulations]

- Standard Permit Conditions -

- (31) 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(e) and (g) and 556a(d)] [40 CFR Part 60.11(d) and 63.6(e)]
- (32) 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]
- (33) 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.

[10 V.S.A. §§556(c) and 556a(d)] [§5-1008(e)(4) of the Regulations]

- (34) 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]
- (35) 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]
- (36) 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]
- (37) 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)]
- (38) 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]
- (39) 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)]
- (40) 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*. [10 V.S.A. §§556(c) and 556a(d)] [§5-403 of the *Regulations*]
- (41) 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)]
- (42) 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)]
- (43) 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]

- (44) 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). [10 V.S.A. §§556(c) and 556a(d)]
- (45) 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). [10 V.S.A. §§556(c) and 556a(d)]
- (46) 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 six (6) 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. [10 V.S.A. §§556(c) and 556a(d)] [§§5-1011 and 5-1012(a) of the Regulations]
- (47) 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.

Permi	t Issued this	day of		_, 2017.
Permi	t Issuance authorize	ed by:		
∖genc	ey of Natural Resou	'ces		
	Boedecker Commis tment of Environme			
3 y :—				
-y.	Heidi C. Hales, Di Air Quality & Clima		Date Signed	

Y:AP Admin\StationaryFacilities\Isovolta, Inc. - Rutland