

PERMIT Under the Environmental Conservation Law (ECL)

IDENTIFICATION INFORMATION

Permit Type: Air State Facility Permit ID: 9-2940-00204/00001

Effective Date: 10/27/2015 Expiration Date: 10/26/2025

Permit Issued To:Archem America Inc

6350 Inducon Dr E Sanborn, NY 14132

Contact: JOSEPH W CLARK

235 COMMERCE WAY

PO BOX 450

UPPER SANDUSKY, OH 43351-0450

Facility: BRIDGESTONE APM COMPANY

6350 Inducon Dr E Sanborn, NY 14132

Description:

- (1) This permit action authorizes construction and operation of a flexible polyurethane foam seat pad manufacturing facility located at the Vantage International Point Industrial Park, Inducon Drive in the Town of Wheatfield, Niagara County, New York.
- (2) Bridgestone APM Company is the owner and operator of the facility manufacturing up to 240,000 seat pieces per month or 2,880,000 seat pieces per year. The manufacturing process includes applying a mold release agent to the mold, pouring raw materials into the mold, accelerating curing through heat, removal of the formed seat, and limited repair of finished seats. Auxiliary operations include material storage, storage of finished products, equipment/injection head cleaning, mold cleaning and conditioning, and heating the building with a natural gas heat source less than 10 MMBtu/hr.
- (3) The facility emission projections indicate all contaminants are emitted at a maximum potential rate less than major source thresholds.
- (4) The flexible polyurethane foam is produced by reacting a diisocyanate, polyol, and water. The diisocyanate compounds used in producing the flexible polyurethane foam are as follows: BENZENE, 2,4-DIISOCYANATO-1-METHYL referred to as toluene diisocyanate (TDI), and METHYLENE BISPHENYL ISOCYANATE referred to as methylene diphenyl diisocyanate (MDI).
- (5) No storage tanks are utilized except one-10,000 gallon nitrogen tank. TDI and MDI are not permitted to be mixed at the facility. Pre-mixed products are received and used in the process.
- (6) The spray application of mold release agent includes two different products in order to reduce VOC emissions. A zero-VOC mold release agent is used on the lid. The bowl of the mold utilizes a solvent based mold release agent, containing up to 97% VOC. This source is vented through emission point EP01000 and



- operates with an overspray filter to capture 90% of the particulate emissions. No VOC emission controls are used at this source. A maximum usage of 9.7 pounds per hour of the solvent based mold release agent is allowed. If the usage equals or exceeds 10 lbs/hr, then in accordance with §212-2.3(b), Table 4, the VOC emissions must be reduced by 90%. The use of a new mold release agent must demonstrate compliance with Part 212 and 201-6 prior to use.
- (7) In accordance with Section 212-2.3, Table 4, TDI/MDI emissions from the mold injection and de-mold processes must be reduced by 90% or greater. Activated carbon filters are used on this emission point. A performance test to demonstrate compliance with the control efficiency must be completed. The carbon adsorption system must be monitored on a routine basis to ensure breakthrough does not occur.
- (8) Air dispersion modeling was completed to compare facility TDI and MDI emission estimates with the Short-term Guideline Concentration (SGC) and the Annual Guideline Concentration. Based on the analysis, an equipment inspection, monitoring and repair program is required.
- (9) Bridgestone APM must comply with the applicable requirements of 40CFR63 Subpart OOOOO—National Emission Standards for Hazardous Air Pollutants for Flexible Polyurethane Foam Production and Fabrication Area Sources. Equipment cleaners or mold release agents, containing methylene chloride, cannot be used at this facility.
- (10) Finished polyurethane seats are repaired using a hot melt adhesive. In accordance with 6NYCRR Part 228-2, Table 1, "Adhesives Applied to Porous Material", the corresponding VOC content limit is 120 g/l, as-applied. Bridgestone is required to complete and submit a Method 24 analysis on the "as-applied" product prior to use. Part 228 applies to the use of adhesives and glues; not the mold release process.
- (11) The renewal application must be submitted to the department at least 180 days, but not more than 18 months, prior to the date of permit expiration. While the renewal application is being processed by the department, the owner or operator of the facility may continue to operate under the terms and conditions of the existing permit, provided the application is submitted in accordance with 6NYCRR Part 201-5.2(c).

By acceptance of this permit, the permittee agrees that the permit is contingent upon strict compliance with the ECL, all applicable regulations, the General Conditions specified and any Special Conditions included as part of this permit.

Permit Administrator:	DAVID S DENK DIVISION OF ENVIRONMENTAL PI 700 DELAWARE AVE BUFFALO, NY 14209	ERMITS			
Authorized Signature:	;	Date:	_/	_/	



Notification of Other State Permittee Obligations

Item A: Permittee Accepts Legal Responsibility and Agrees to Indemnification

The permittee expressly agrees to indemnify and hold harmless the Department of Environmental Conservation of the State of New York, its representatives, employees and agents ("DEC") for all claims, suits, actions, and damages, to the extent attributable to the permittee's acts or omissions in connection with the compliance permittee's undertaking of activities in connection with, or operation and maintenance of, the facility or facilities authorized by the permit whether in compliance or not in any compliance with the terms and conditions of the permit. This indemnification does not extend to any claims, suits, actions, or damages to the extent attributable to DEC's own negligent or intentional acts or omissions, or to any claims, suits, or actions naming the DEC and arising under article 78 of the New York Civil Practice Laws and Rules or any citizen suit or civil rights provision under federal or state laws.

Item B: Permittee's Contractors to Comply with Permit

The permittee is responsible for informing its independent contractors, employees, agents and assigns of their responsibility to comply with this permit, including all special conditions while acting as the permittee's agent with respect to the permitted activities, and such persons shall be subject to the same sanctions for violations of the Environmental Conservation Law as those prescribed for the permittee.

Item C: Permittee Responsible for Obtaining Other Required Permits

The permittee is responsible for obtaining any other permits, approvals, lands, easements and rights-of-way that may be required to carry out the activities that are authorized by this permit.

Item D: No Right to Trespass or Interfere with Riparian Rights

This permit does not convey to the permittee any right to trespass upon the lands or interfere with the riparian rights of others in order to perform the permitted work nor does it authorize the impairment of any rights, title, or interest in real or personal property held or vested in a person not a party to the permit.



PAGE LOCATION OF CONDITIONS

PAGE

DEC GENERAL CONDITIONS

General Provisions

- 5 1 Facility Inspection by the Department
- 5 2 Relationship of this Permit to Other Department Orders and Determinations
- 5 3 Applications for permit renewals, modifications and transfers
- 6 4 Permit modifications, suspensions or revocations by the Department Facility Level
- 6 5 Submission of application for permit modification or renewal-REGION 9 HEADQUARTERS



DEC GENERAL CONDITIONS **** General Provisions **** GENERAL CONDITIONS - Apply to ALL Authorized Permits.

Condition 1: Facility Inspection by the Department
Applicable State Requirement: ECL 19-0305

Item 1.1:

The permitted site or facility, including relevant records, is subject to inspection at reasonable hours and intervals by an authorized representative of the Department of Environmental Conservation (the Department) to determine whether the permittee is complying with this permit and the ECL. Such representative may order the work suspended pursuant to ECL 71-0301 and SAPA 401(3).

Item 1.2:

The permittee shall provide a person to accompany the Department's representative during an inspection to the permit area when requested by the Department.

Item 1.3:

A copy of this permit, including all referenced maps, drawings and special conditions, must be available for inspection by the Department at all times at the project site or facility. Failure to produce a copy of the permit upon request by a Department representative is a violation of this permit.

Condition 2: Relationship of this Permit to Other Department Orders and Determinations Applicable State Requirement: ECL 3-0301 (2) (m)

Item 2.1:

Unless expressly provided for by the Department, issuance of this permit does not modify, supersede or rescind any order or determination previously issued by the Department or any of the terms, conditions or requirements contained in such order or determination.

Condition 3: Applications for permit renewals, modifications and transfers Applicable State Requirement: 6 NYCRR 621.11

Item 3.1:

The permittee must submit a separate written application to the Department for renewal, modification or transfer of this permit. Such application must include any forms or supplemental information the Department requires. Any renewal, modification or transfer granted by the Department must be in writing.

Item 3.2:

The permittee must submit a renewal application at least 180 days before expiration of permits for Title V Facility Permits, or at least 30 days before expiration of permits for State Facility Permits.

Item 3.3:

Permits are transferrable with the approval of the department unless specifically prohibited by the statute, regulation or another permit condition. Applications for permit transfer should be submitted prior to actual transfer of ownership.

Division of Air Resources



Facility DEC ID: 9294000204

Condition 4: Permit modifications, suspensions or revocations by the Department Applicable State Requirement: 6 NYCRR 621.13

Item 4.1:

The Department reserves the right to exercise all available authority to modify, suspend, or revoke this permit in accordance with 6NYCRR Part 621. The grounds for modification, suspension or revocation include:

- a) materially false or inaccurate statements in the permit application or supporting papers;
- b) failure by the permittee to comply with any terms or conditions of the permit;
- c) exceeding the scope of the project as described in the permit application;
- d) newly discovered material information or a material change in environmental conditions, relevant technology or applicable law or regulations since the issuance of the existing permit;
- e) noncompliance with previously issued permit conditions, orders of the commissioner, any provisions of the Environmental Conservation Law or regulations of the Department related to the permitted activity.

**** Facility Level ****

Condition 5: Submission of application for permit modification or renewal-REGION 9
HEADQUARTERS
Applicable State Requirement: 6 NYCRR 621.6 (a)

Item 5.1:

Submission of applications for permit modification or renewal are to be submitted to:

NYSDEC Regional Permit Administrator Region 9 Headquarters Division of Environmental Permits 270 Michigan Avenue Buffalo, NY 14203-2915 (716) 851-7165



Permit Under the Environmental Conservation Law (ECL)

ARTICLE 19: AIR POLLUTION CONTROL - AIR STATE FACILITY PERMIT

IDENTIFICATION INFORMATION

Permit Issued To:Archem America Inc

6350 Inducon Dr E Sanborn, NY 14132

Facility: BRIDGESTONE APM COMPANY

6350 Inducon Dr E Sanborn, NY 14132

Authorized Activity By Standard Industrial Classification Code:

3086 - PLASTICS FOAM PRODUCTS

Permit Effective Date: 10/27/2015 Permit Expiration Date: 10/26/2025



PAGE LOCATION OF CONDITIONS

PAGE	
	FEDERALLY ENFORCEABLE CONDITIONS
	Facility Level
6	16 6 NYCRR 211.2: Visible Emissions Limited
6	2 40CFR 63, Subpart OOOOOO: Compliance Demonstration
7	3 40CFR 63.11417(c)(1), Subpart OOOOOO: Compliance Demonstration
	Emission Unit Level
	EU=1-PROCS,Proc=002
8	4 6 NYCRR Subpart 228-2: Compliance Demonstration
9	5 6 NYCRR 228-2.4 (b) (1): Compliance Demonstration
10	6 6 NYCRR 228-2.4 (b) (3): Compliance Demonstration
11	7 6 NYCRR 228-2.4 (b) (4): Compliance Demonstration
12	8 6 NYCRR 228-2.4 (d): Compliance Demonstration
13	9 6 NYCRR 228-2.5 (a): Compliance Demonstration
14	10 6 NYCRR 228-2.5 (c): Compliance Demonstration
	EU=1-PROCS,EP=01000,Proc=001,ES=1MRAS
15	21 6 NYCRR 212-2.3 (b): Compliance Demonstration
	STATE ONLY ENFORCEABLE CONDITIONS
	Facility Level
19	11 ECL 19-0301: Contaminant List
20	12 6 NYCRR 201-1.4: Malfunctions and start-up/shutdown activities
20	13 6 NYCRR Subpart 201-5: Emission Unit Definition
21	14 6 NYCRR 201-5.2 (c): Renewal deadlines for state facility permits
21	15 6 NYCRR 201-5.3 (c): Compliance Demonstration
22	1 6 NYCRR 211.1: Air pollution prohibited
	Emission Unit Level
22	17 6 NYCRR Subpart 201-5: Emission Point Definition By Emission Unit
22	18 6 NYCRR Subpart 201-5: Process Definition By Emission Unit
	EU=1-PROCS,Proc=001
24	19 6 NYCRR 212-2.1 (a): Compliance Demonstration
25	20 6 NYCRR 212-2.1 (a): Compliance Demonstration
	FII_1 DDOCS FD_02000 D001
27	EU=1-PROCS,EP=02000,Proc=001
27 28	22 6 NYCRR 212-2.1 (a): Compliance Demonstration 23 6 NYCRR 212-2.1 (a): Compliance Demonstration
∠0	23 U IN I CKK 212-2.1 (a). COMPHANCE DEMONSTRATION



FEDERALLY ENFORCEABLE CONDITIONS

FINAL **** Facility Level ****

NOTIFICATION OF GENERAL PERMITTEE OBLIGATIONS

This section contains terms and conditions which are federally enforceable. Permittees may also have other obligations under regulations of general applicability

Item A: Sealing - 6 NYCRR 200.5

The Commissioner may seal an air contamination source to prevent its operation if compliance with 6 NYCRR Chapter III is not met within the time provided by an order of the Commissioner issued in the case of the violation. Sealing means labeling or tagging a source to notify any person that operation of the source is prohibited, and also includes physical means of preventing the operation of an air contamination source without resulting in destruction of any equipment associated with such source, and includes, but is not limited to, bolting, chaining or wiring shut control panels, apertures or conduits associated with such source.

No person shall operate any air contamination source sealed by the Commissioner in accordance with this section unless a modification has been made which enables such source to comply with all requirements applicable to such modification.

Unless authorized by the Commissioner, no person shall remove or alter any seal affixed to any contamination source in accordance with this section.

Item B: Acceptable Ambient Air Quality - 6 NYCRR 200.6

Notwithstanding the provisions of 6 NYCRR Chapter III, Subchapter A, no person shall allow or permit any air contamination source to emit air contaminants in quantities which alone or in combination with emissions from other air contamination sources would contravene any applicable ambient air quality standard and/or cause air pollution. In such cases where contravention occurs or may occur, the Commissioner shall specify the degree and/or method of emission control required.

Item C: Maintenance of Equipment - 6 NYCRR 200.7

Any person who owns or operates an air contamination source which is equipped with an emission control device shall operate such device and keep it in a satisfactory state of maintenance and repair in accordance with ordinary and necessary practices, standards and procedures, inclusive of manufacturer's specifications,



required to operate such device effectively.

Item D: Unpermitted Emission Sources - 6 NYCRR 201-1.2

- (a) Except as otherwise provided by this Part, construction or operation of a new, modified or existing air contamination source without a registration or permit issued pursuant to this Part is prohibited.
- (b) If an existing facility or emission source was subject to the permitting requirements of this Part at the time of construction or modification, and the owner or operator failed to apply for a permit or registration as described in this Part, the owner or operator must apply for a permit or registration in accordance with the provisions of this Part. The facility or emission source is subject to all regulations that were applicable to it at the time of construction or modification and any subsequent requirements applicable to existing emission sources.

Item E: Recycling and Salvage - 6 NYCRR 201-1.7

Where practical, any person who owns or operates an air contamination source shall recycle or salvage air contaminants collected in an air cleaning device according to the requirements of 6 NYCRR.

Item F: Prohibition of Reintroduction of Collected Contaminants to the Air - 6 NYCRR 201-1.8

No person shall unnecessarily remove, handle, or cause to be handled, collected air contaminants from an air cleaning device for recycling, salvage or disposal in a manner that would reintroduce them to the outdoor atmosphere.

Item G: Proof of Eligibility for Sources Defined as Exempt Activities - 6 NYCRR 201-3.2 (a)

The owner and/or operator of an emission source or unit that is eligible to be exempt, may be required to certify that it operates within the specific criteria described in 6 NYCRR Subpart 201-3. The owner or operator of any such emission source must maintain all required records on-site for a period of five years and make them available to representatives of the Department upon request. Department representatives must be granted access to any facility which contains emission sources or units subject to 6 NYCRR Subpart 201-3, during normal operating hours, for the purpose of determining compliance with this and any other state and federal air pollution control requirements, regulations, or law.

Item H: Proof of Eligibility for Sources Defined as Trivial



Activities - 6 NYCRR 201-3.3 (a)

The owner and/or operator of an emission source or unit that is listed as being trivial in 6 NYCRR Part 201 may be required to certify that it operates within the specific criteria described in 6 NYCRR Subpart 201-3. The owner or operator of any such emission source must maintain all required records on-site for a period of five years and make them available to representatives of the Department upon request. Department representatives must be granted access to any facility which contains emission sources or units subject to 6 NYCRR Subpart 201-3, during normal operating hours, for the purpose of determining compliance with this and any other state and federal air pollution control requirements, regulations, or law.

Item I: Required Emission Tests - 6 NYCRR 202-1.1

An acceptable report of measured emissions shall be submitted, as may be required by the Commissioner, to ascertain compliance or noncompliance with any air pollution code, rule, or regulation. Failure to submit a report acceptable to the Commissioner within the time stated shall be sufficient reason for the Commissioner to suspend or deny an operating permit. Notification and acceptable procedures are specified in 6 NYCRR Subpart 202-1.

Item J: Open Fires Prohibitions - 6 NYCRR 215.2

Except as allowed by section 215.3 of 6 NYCRR Part 215, no person shall burn, cause, suffer, allow or permit the burning of any materials in an open fire.

Item K: Permit Exclusion - ECL 19-0305

The issuance of this permit by the Department and the receipt thereof by the Applicant does not and shall not be construed as barring, diminishing, adjudicating or in any way affecting any legal, administrative or equitable rights or claims, actions, suits, causes of action or demands whatsoever that the Department may have against the Applicant for violations based on facts and circumstances alleged to have occurred or existed prior to the effective date of this permit, including, but not limited to, any enforcement action authorized pursuant to the provisions of applicable federal law, the Environmental Conservation Law of the State of New York (ECL) and Chapter III of the Official Compilation of the Codes, Rules and Regulations of the State of New York (NYCRR). The issuance of this permit also shall not in any way affect pending or future enforcement actions under the Clean Air Act brought by the United States or any person.

Item L: Federally Enforceable Requirements - 40 CFR 70.6 (b)



Permit ID: 9-2940-00204/00001 Facility DEC ID: 9294000204

All terms and conditions in this permit required by the Act or any applicable requirement, including any provisions designed to limit a facility's potential to emit, are enforceable by the Administrator and citizens under the Act. The Department has, in this permit, specifically designated any terms and conditions that are not required under the Act or under any of its applicable requirements as being enforceable under only state regulations.

FEDERAL APPLICABLE REQUIREMENTS The following conditions are federally enforceable.

Condition 16: Visible Emissions Limited

Effective between the dates of 10/27/2015 and 10/26/2025

Applicable Federal Requirement: 6 NYCRR 211.2

Item 16.1:

Except as permitted by a specific part of this Subchapter and for open fires for which a restricted burning permit has been issued, no person shall cause or allow any air contamination source to emit any material having an opacity equal to or greater than 20 percent (six minute average) except for one continuous six-minute period per hour of not more than 57 percent opacity.

Condition 2: Compliance Demonstration

Effective between the dates of 10/27/2015 and 10/26/2025

Applicable Federal Requirement: 40CFR 63, Subpart OOOOOO

Item 2.1:

The Compliance Demonstration activity will be performed for the Facility.

Regulated Contaminant(s):

CAS No: 000101-68-8 METHYLENE BISPHENYL ISOCYANATE CAS No: 000584-84-9 BENZENE, 2,4-DIISOCYANATO-1-METHYL-

Item 2.2:

Compliance Demonstration shall include the following monitoring:

Monitoring Type: MONITORING OF PROCESS OR CONTROL

DEVICE PARAMETERS AS SURROGATE

Monitoring Description:

EMISSION STANDARDS FOR MOLDED FLEXIBLE POLYURETHANE FOAM PRODUCTION

§63.11416:



- (c) If you own or operate a new or existing molded foam affected source, you must comply with the requirements in paragraphs (c)(1) and (2) as follows:
- (1) You must not use a material containing methylene chloride as an equipment cleaner to flush the mixhead or use a material containing methylene chloride elsewhere as an equipment cleaner in a molded flexible polyurethane foam process.
- (2) You must not use a mold release agent containing methylene chloride in a molded flexible polyurethane foam process.
- (f) You may demonstrate compliance with the requirements in paragraph (c) of this section using adhesive usage records, Material Safety Data Sheets, and engineering calculations.

Parameter Monitored: DICHLOROMETHANE

Upper Permit Limit: 0 pounds

Monitoring Frequency: AS REQUIRED - SEE PERMIT MONITORING

DESCRIPTION

Averaging Method: MAXIMUM - NOT TO BE EXCEEDED AT ANY

TIME (INSTANTANEOUS/DISCRETE OR GRAB)

Reporting Requirements: AS REQUIRED - SEE MONITORING DESCRIPTION

Condition 3: Compliance Demonstration

Effective between the dates of 10/27/2015 and 10/26/2025

Applicable Federal Requirement: 40CFR 63.11417(c)(1), Subpart OOOOOO

Item 3.1:

The Compliance Demonstration activity will be performed for the Facility.

Regulated Contaminant(s):

CAS No: 000101-68-8 METHYLENE BISPHENYL ISOCYANATE CAS No: 000584-84-9 BENZENE, 2,4-DIISOCYANATO-1-METHYL-

Item 3.2:

Compliance Demonstration shall include the following monitoring:

Monitoring Type: RECORD KEEPING/MAINTENANCE PROCEDURES Monitoring Description:

COMPLIANCE REQUIREMENTS FOR MOLDED FLEXIBLE POLYURETHANE FOAM PRODUCTION

§63.11417:

(c) You must have a compliance certification on file by the compliance date. This certification must contain the statements in paragraph (c)(1), of this section, and must be signed by a responsible official.



- (1) For a molded foam affected source:
- (i) "This facility does not use any equipment cleaner to flush the mixhead which contains methylene chloride, or any other equipment cleaner containing methylene chloride in a molded flexible polyurethane foam process in accordance with §63.11416(c)(1)."
- (ii) "This facility does not use any mold release agent containing methylene chloride in a molded flexible polyurethane foam process in accordance with §63.11416(c)(2)."
- (d) For molded foam affected sources, you must maintain records of the information used to demonstrate compliance, as required in §63.11416(f). You must maintain the records for 5 years, with the last 2 years of data retained on site. The remaining 3 years of data may be maintained off site.

Monitoring Frequency: AS REQUIRED - SEE PERMIT MONITORING DESCRIPTION

Reporting Requirements: AS REQUIRED - SEE MONITORING DESCRIPTION

**** Emission Unit Level ****

Condition 4: Compliance Demonstration Effective between the dates of 10/27/2015 and 10/26/2025

Applicable Federal Requirement: 6 NYCRR Subpart 228-2

Item 4.1:

The Compliance Demonstration activity will be performed for:

Emission Unit: 1-PROCS

Process: 002

Regulated Contaminant(s):

CAS No: 0NY998-00-0 VOC

Item 4.2:

Compliance Demonstration shall include the following monitoring:

Monitoring Type: MONITORING OF PROCESS OR CONTROL DEVICE PARAMETERS AS SURROGATE

Monitoring Description:

FOAM REPAIR HOT MELT ADHESIVE VOC LIMITS

(1) A hot melt adhesive is used to repair finished polyurethane foam seats. In accordance with 6NYCRR Part



228-2, Table 1 for "Adhesives Applied to Porous Material", the corresponding VOC content limit is 120 grams per liter (g/l), as-applied. Compliance with this limit is demonstrated through a Method 24 analysis.

- (2) Bridgestone plans to use a Henkel product known as Technomelt AS 8843 IDH# 1679622. The supplier claims the product has no VOC. The product does contain dibutylphthalate (CAS# 84-74-2), a known VOC and HAP, that may be present at a concentration of less than 500 ppb. The supplier has not completed a Method 24 analysis on this product.
- (3) Bridgestone is required to complete and submit a Method 24 analysis on the "as-applied" product prior to use. An Environmental Laboratory Approval Program (ELAP) certified laboratory for Method 24 must be utilized.
- (4) The projected use of any new products in this process must demonstrate compliance with Subpart 228 and satisfy any applicable permit modification requirements prior to use.

Parameter Monitored: VOC CONTENT Upper Permit Limit: 120 grams VOC per liter Reference Test Method: EPA Method 24

Monitoring Frequency: PER BATCH OF PRODUCT/RAW MATERIAL

CHANGE

Averaging Method: AVERAGING METHOD AS PER REFERENCE TEST METHOD INDICATED

Reporting Requirements: AS REQUIRED - SEE MONITORING DESCRIPTION

Condition 5: Compliance Demonstration Effective between the dates of 10/27/2015 and 10/26/2025

Applicable Federal Requirement: 6 NYCRR 228-2.4 (b) (1)

Item 5.1:

The Compliance Demonstration activity will be performed for:

Emission Unit: 1-PROCS

Process: 002

Regulated Contaminant(s):

CAS No: 0NY998-00-0 VOC

Item 5.2:

Compliance Demonstration shall include the following monitoring:

Monitoring Type: WORK PRACTICE INVOLVING SPECIFIC OPERATIONS



Monitoring Description:

FOAM REPAIR HOT MELT ADHESIVE SURFACE PREPARATION SOLVENT VOC LIMITS

The concentration of volatile organic compounds (VOC) in all surface preparation solvents used in the adhesive process at the facility shall be less than 70 grams per liter.

Work Practice Type: PARAMETER OF PROCESS MATERIAL

Process Material: SOLVENT

Parameter Monitored: VOC CONTENT Upper Permit Limit: 70 grams per liter Reference Test Method: EPA Method 24

Monitoring Frequency: PER BATCH OF PRODUCT/RAW MATERIAL

CHANGE

Averaging Method: MAXIMUM - NOT TO BE EXCEEDED AT ANY TIME (INSTANTANEOUS/DISCRETE OR GRAB)

Reporting Requirements: UPON REQUEST BY REGULATORY AGENCY

Condition 6: Compliance Demonstration

Effective between the dates of 10/27/2015 and 10/26/2025

Applicable Federal Requirement: 6 NYCRR 228-2.4 (b) (3)

Item 6.1:

The Compliance Demonstration activity will be performed for:

Emission Unit: 1-PROCS

Process: 002

Regulated Contaminant(s):

CAS No: 0NY998-00-0 VOC

Item 6.2:

Compliance Demonstration shall include the following monitoring:

Monitoring Type: WORK PRACTICE INVOLVING SPECIFIC

OPERATIONS

Monitoring Description:

FOAM REPAIR HOT MELT ADHESIVE CLEANUP SOLVENT VOC LIMITS

The composite vapor pressure of all cleanup solvents used in the adhesive process at the facility shall be less than 45 mm Hg at 20 degrees Celsius.

Work Practice Type: PARAMETER OF PROCESS MATERIAL



Permit ID: 9-2940-00204/00001 Facility DEC ID: 9294000204

Process Material: SOLVENT

Parameter Monitored: VOC CONTENT

Upper Permit Limit: 45 millimeters of mercury

Monitoring Frequency: PER BATCH OF PRODUCT/RAW MATERIAL

CHANGE

Averaging Method: MAXIMUM - NOT TO BE EXCEEDED AT ANY

TIME (INSTANTANEOUS/DISCRETE OR GRAB)

Reporting Requirements: UPON REQUEST BY REGULATORY AGENCY

Condition 7: Compliance Demonstration

Effective between the dates of 10/27/2015 and 10/26/2025

Applicable Federal Requirement: 6 NYCRR 228-2.4 (b) (4)

Item 7.1:

The Compliance Demonstration activity will be performed for:

Emission Unit: 1-PROCS

Process: 002

Regulated Contaminant(s):

CAS No: 0NY998-00-0 VOC

Item 7.2:

Compliance Demonstration shall include the following monitoring:

Monitoring Type: WORK PRACTICE INVOLVING SPECIFIC OPERATIONS

Monitoring Description:

When performing the removal of a commercial or industrial adhesive, sealant, adhesive primer or sealant primer from the parts of spray application equipment, the facility owner or operator must:

- 1. use an enclosed cleaning system, or an equivalent cleaning system as determined by the applicable test method identified in 6 NYCRR Part 228-2.6(h);
- 2. use a solvent with a VOC content less than or equal to 70 grams per liter; and
- 3. soak all parts containing dried adhesive in a solvent with a composite vapor pressure, excluding water and exempt compounds, less than or equal to 9.5 mm Hg at 20 degrees Celsius. The solvent and any soaking parts must be kept in a closed container at all times except when adding or removing parts from the container.

Work Practice Type: PARAMETER OF PROCESS MATERIAL

Process Material: SOLVENT

Parameter Monitored: VOC CONTENT Upper Permit Limit: 70 grams VOC per liter



Permit ID: 9-2940-00204/00001 Facility DEC ID: 9294000204

Monitoring Frequency: AS REQUIRED - SEE PERMIT MONITORING

DESCRIPTION

Averaging Method: MAXIMUM - NOT TO BE EXCEEDED AT ANY TIME (INSTANTANEOUS/DISCRETE OR GRAB)

Reporting Requirements: UPON REQUEST BY REGULATORY AGENCY

Condition 8: Compliance Demonstration

Effective between the dates of 10/27/2015 and 10/26/2025

Applicable Federal Requirement: 6 NYCRR 228-2.4 (d)

Item 8.1:

The Compliance Demonstration activity will be performed for:

Emission Unit: 1-PROCS

Process: 002

Regulated Contaminant(s):

CAS No: 0NY998-00-0 VOC

Item 8.2:

Compliance Demonstration shall include the following monitoring:

Monitoring Type: RECORD KEEPING/MAINTENANCE PROCEDURES Monitoring Description:

Work practices shall be employed at facilities where the total actual VOC emissions from all industrial adhesive application processes, including related cleaning activities, equal or exceed three tons in a 12-month rolling period, before consideration of emission control equipment. Work practices shall include:

- (1) the following types of application equipment, with the use of low-VOC adhesives or adhesive primers: electrostatic spray; HVLP spray; flow coat; roll coat or hand application, including non-spray application methods similar to hand or mechanically powered caulking gun, brush, or direct hand application; dip coat (including electrodeposition); airless spray; air-assisted airless spray; any other adhesive application method, subject to Department approval, capable of achieving a transfer efficiency equivalent to or better than that achieved by HVLP spraying;
- (2) the following work practices for storage, mixing operations, and handling operations for adhesives, thinners, and adhesive-related waste materials that:
- (i) store all VOC-containing adhesives, adhesive primers, and process related waste materials in closed containers;



- (ii) ensure that mixing and storage containers used for VOC-containing adhesives, adhesive primers, and process related waste materials are kept closed at all times except when depositing or removing these materials;
- (iii) minimize spills of VOC-containing adhesives, adhesive primers, and process related waste materials; and
- (iv) convey VOC-containing adhesives, adhesive primers, and process related waste materials from one location to another in closed containers or pipes.
- (3) the following work practices to reduce VOC emissions from cleaning materials used in industrial adhesive application processes that:
- (i) store all VOC-containing cleaning materials and used shop towels in closed containers;
- (ii) ensure that storage containers used for VOC-containing materials are kept closed at all times except when depositing or removing these materials:
- (iii) minimize spills of VOC-containing cleaning materials;
- (iv) convey VOC-containing cleaning materials from one location to another in closed containers or pipes;and
- (v) minimize VOC emission from cleaning of application, storage, mixing, and conveying equipment by ensuring that equipment cleaning is performed without atomizing the cleaning solvent and all spent solvent is captured in closed containers.

Monitoring Frequency: AS REQUIRED - SEE PERMIT MONITORING DESCRIPTION

Reporting Requirements: UPON REQUEST BY REGULATORY AGENCY

Condition 9: Compliance Demonstration

Effective between the dates of 10/27/2015 and 10/26/2025

Applicable Federal Requirement: 6 NYCRR 228-2.5 (a)

Item 9.1:

The Compliance Demonstration activity will be performed for:



Emission Unit: 1-PROCS

Process: 002

Regulated Contaminant(s):

CAS No: 0NY998-00-0 VOC

Item 9.2:

Compliance Demonstration shall include the following monitoring:

Monitoring Type: RECORD KEEPING/MAINTENANCE PROCEDURES Monitoring Description:

Facilities using products subject to a VOC content limit in 6 NYCRR Part 228-2.4(a) shall maintain records demonstrating compliance with the VOC content limits, including, but not limited to, the following information:

- (1) a list of each commercial and industrial adhesive, sealant, adhesive primer, sealant primer cleanup solvent and surface preparation solvent in use and in storage at the facility;
- (2) identification of each product by product name and description;
- (3) the VOC content of each product as supplied;
- (4) the mix ratio of any catalysts, reducers or other components used;
- (5) the final VOC content or vapor pressure, as applied; and
- (6) the monthly volume of each commercial or industrial adhesive, sealant, adhesive primer, sealant primer, cleanup or surface preparation solvent used at the facility.

Monitoring Frequency: AS REQUIRED - SEE PERMIT MONITORING DESCRIPTION

Reporting Requirements: UPON REQUEST BY REGULATORY AGENCY

Condition 10: Compliance Demonstration

Effective between the dates of 10/27/2015 and 10/26/2025

Applicable Federal Requirement: 6 NYCRR 228-2.5 (c)

Item 10.1:

The Compliance Demonstration activity will be performed for:



Permit ID: 9-2940-00204/00001 Facility DEC ID: 9294000204

Emission Unit: 1-PROCS

Process: 002

Regulated Contaminant(s):

CAS No: 0NY998-00-0 VOC

Item 10.2:

Compliance Demonstration shall include the following monitoring:

Monitoring Type: RECORD KEEPING/MAINTENANCE PROCEDURES Monitoring Description:

All records made to determine compliance with Subpart 228-2 shall be maintained for five years from the date such record is created and shall be made available to the Department within 90 days of a request.

Monitoring Frequency: AS REQUIRED - SEE PERMIT MONITORING DESCRIPTION

Reporting Requirements: UPON REQUEST BY REGULATORY AGENCY

Condition 21: Compliance Demonstration Effective between the dates of 10/27/2015 and 10/26/2025

Applicable Federal Requirement: 6 NYCRR 212-2.3 (b)

Item 21.1:

The Compliance Demonstration activity will be performed for:

Emission Unit: 1-PROCS Emission Point: 01000
Process: 001 Emission Source: 1MRAS

Regulated Contaminant(s):

CAS No: 0NY998-00-0 VOC

Item 21.2:

Compliance Demonstration shall include the following monitoring:

Monitoring Type: MONITORING OF PROCESS OR CONTROL

DEVICE PARAMETERS AS SURROGATE

Monitoring Description:

MOLD RELEASE AGENT PART 212 EVALUATION

(1) A mold release agent, identified as Rikeizai K-403K-45, is used to spray the bowl of the molds prior to pouring of the polyurethane chemical components. Rikeizai contains up to 97% petroleum hydrocarbon distillates (CAS# 64742-47-8) and solvent naptha (petroleum), medium aliphatic (CAS# 8052-41-3). As specified in item (6) below, the use of a cosolvent containing a lower VOC content must demonstrate compliance with Part 212 and



201-6 prior to use.

- (2) In accordance with Section 212-1.3, Table 1, an Environmental Rating of "B" is assigned to these air contaminants where the evaluation criteria includes an air contaminant whose discharge results, or may result in only moderate and essentially localized effects; or where the multiplicity of sources of the contaminant in any given area require an overall reduction of the atmospheric burden of that contaminant.
- (3) The maximum hourly emission rate potential for this process is 9.7 lbs/hr. In accordance with Section 212-2.3, Table 4, the degree of air cleaning required for a B-rated contaminant with an emission rate potential less than 10 lbs/hr is governed by the guideline concentration for the contaminant and through use of air dispersion modeling. The Annual Guideline Concentration (AGC) for each contaminant is 900 ug/m3. A Short-term Guideline Concentration (SGC) is not applicable for these contaminants. The air dispersion modeling demonstrated the maximum off-site air concentration is less than the AGC.
- (4) Bridgestone shall keep records to demonstrate the usage does not equal or exceed 10 lbs/hr. The records shall be developed based on a correlation between pollutant emission rates and an easily measured process parameter. These data can be correlated with mold release agent operation parameters, such as coating usage rates, pieces of equipment coated, or time. If the emission rate equals or exceeds 10 lbs/hr, then in accordance with §212-2.3(b), Table 4, the VOC emissions must be reduced by 90%.
- (5) If new SGC or AGC data become available for these contaminants, then a re-evaluation of the impact of this source must be completed.
- (6) The projected use of any new products in this process must demonstrate compliance with Subpart 212 and satisfy any applicable permit modification requirements prior to use.

Parameter Monitored: VOC

Upper Permit Limit: 9.9 pounds per hour

Monitoring Frequency: AS REQUIRED - SEE PERMIT MONITORING

DESCRIPTION

Averaging Method: MAXIMUM - NOT TO EXCEED STATED VALUE -

SEE MONITORING DESCRIPTION

Reporting Requirements: ANNUALLY (CALENDAR)

Reports due 30 days after the reporting period.



Permit ID: 9-2940-00204/00001 Facility DEC ID: 9294000204

The initial report is due 1/30/2016. Subsequent reports are due every 12 calendar month(s).



STATE ONLY ENFORCEABLE CONDITIONS **** Facility Level ****

NOTIFICATION OF GENERAL PERMITTEE OBLIGATIONS

This section contains terms and conditions which are not federally enforceable. Permittees may also have other obligations under regulations of general applicability

Item A: Emergency Defense - 6 NYCRR 201-1.5

An emergency, as defined in 6 NYCRR subpart 201-2, constitutes an affirmative defense to penalties sought in an enforcement action brought by the department for noncompliance with emissions limitations or permit conditions for all facilities in New York State.

- (a) The affirmative defense of emergency shall demonstrate, through properly signed, contemporaneous operating logs, or other relevant evidence that:
- (1) an emergency occurred and that the facility owner or operator can identify the cause(s) of the emergency;
- (2) the equipment at the facility was being properly operated and maintained;
- (3) during the period of the emergency the facility owner or operator took all reasonable steps to minimize the levels of emissions that exceeded the emission standards, or other requirements in the permit; and
- (4) the facility owner or operator notified the department within two working days after the event occurred. This notice must contain a description of the emergency, any steps taken to mitigate emissions, and any corrective actions taken.
- (b) In any enforcement proceeding, the facility owner or operator seeking to establish the occurrence of an emergency has the burden of proof.
- (c) This provision is in addition to any emergency or malfunction provision contained in any applicable requirement.

Item B: Public Access to Recordkeeping for Facilities With State Facility Permits - 6 NYCRR 201-1.10 (a)

Where facility owners and/or operators keep records pursuant to compliance with the requirements of 6 NYCRR Subpart 201-5.4, and/or the emission capping requirements of 6 NYCRR Subpart 201-7, the Department will make such records available to the public upon request in accordance



with 6 NYCRR Part 616 - Public Access to Records. Facility owners and/or operators must submit the records required to comply with the request within sixty working days of written notification by the Department.

Item C: General Provisions for State Enforceable Permit Terms and Condition - 6 NYCRR Part 201-5

Any person who owns and/or operates stationary sources shall operate and maintain all emission units and any required emission control devices in compliance with all applicable Parts of this Chapter and existing laws, and shall operate the facility in accordance with all criteria, emission limits, terms, conditions, and standards in this permit. Failure of such person to properly operate and maintain the effectiveness of such emission units and emission control devices may be sufficient reason for the Department to revoke or deny a permit.

The owner or operator of the permitted facility must maintain all required records on-site for a period of five years and make them available to representatives of the Department upon request. Department representatives must be granted access to any facility regulated by this Subpart, during normal operating hours, for the purpose of determining compliance with this and any other state and federal air pollution control requirements, regulations or law.

STATE ONLY APPLICABLE REQUIREMENTS The following conditions are state only enforceable.

Condition 11: Contaminant List

Effective between the dates of 10/27/2015 and 10/26/2025

Applicable State Requirement: ECL 19-0301

Item 11.1:

Emissions of the following contaminants are subject to contaminant specific requirements in this permit(emission limits, control requirements or compliance monitoring conditions).

CAS No: 000101-68-8

Name: METHYLENE BISPHENYL ISOCYANATE

CAS No: 000584-84-9

Name: BENZENE, 2,4-DIISOCYANATO-1-METHYL-

CAS No: 0NY998-00-0

Name: VOC



Permit ID: 9-2940-00204/00001 Facility DEC ID: 9294000204

Condition 12: Malfunctions and start-up/shutdown activities
Effective between the dates of 10/27/2015 and 10/26/2025

Applicable State Requirement: 6 NYCRR 201-1.4

Item 12.1:

- (a) The facility owner or operator shall take all necessary and appropriate actions to prevent the emission of air pollutants that result in contravention of any applicable emission standard during periods of start-up, shutdown, or malfunction.
- (b) The facility owner or operator shall compile and maintain records of all equipment malfunctions, maintenance, or start-up/shutdown activities when they can be expected to result in an exceedance of any applicable emission standard, and shall submit a report of such activities to the department when requested to do so, or when so required by a condition of a permit issued for the corresponding air contamination source. Such reports shall state whether any violations occurred and, if so, whether they were unavoidable, include the time, frequency and duration of the maintenance and/or start-up/shutdown activities, and an estimate of the emission rates of any air contaminants released. Such records shall be maintained for a period of at least five years and made available for review to department representatives upon request. Facility owners or operators subject to continuous stack monitoring and quarterly reporting requirements need not submit additional reports for equipment maintenance or start-up/shutdown activities for the facility to the department.
- (c) In the event that emissions of air contaminants in excess of any emission standard in this Subchapter occur due to a malfunction, the facility owner or operator shall compile and maintain records of the malfunction and notify the department as soon as possible during normal working hours, but not later than two working days after becoming aware that the malfunction occurred. When requested by the department, the facility owner or operator shall submit a written report to the department describing the malfunction, the corrective action taken, identification of air contaminants, and an estimate of the emission rates.
- (d) The department may also require the owner or operator to include, in reports described under Subdivisions (b) and (c) of this Section, an estimate of the maximum ground level concentration of each air contaminant emitted and the effect of such emissions.
- (e) A violation of any applicable emission standard resulting from start-up, shutdown, or malfunction conditions at a permitted or registered facility may not be subject to an enforcement action by the department and/or penalty if the department determines, in its sole discretion, that such a violation was unavoidable. The actions and recordkeeping and reporting requirements listed above must be adhered to in such circumstances.

Condition 13: Emission Unit Definition
Effective between the dates of 10/27/2015 and 10/26/2025

Applicable State Requirement: 6 NYCRR Subpart 201-5

Item 13.1:

The facility is authorized to perform regulated processes under this permit for: Emission Unit: 1-PROCS Emission Unit Description:



Permit ID: 9-2940-00204/00001 Facility DEC ID: 9294000204

Emission Unit 1-PROCS includes the processes associated with manufacturing flexible polyurethane foam seats. The facility is permitted production of up to 240,000 seat pieces per month or 2,880,000 seat pieces per year. The processes from the facility include the application of mold release agents, pouring raw materials into the mold, and the curing oven. In addition, control equipment consisting of activated carbon and an overspray filter is also included in this emission unit.

Building(s): MAIN

Condition 14: Renewal deadlines for state facility permits
Effective between the dates of 10/27/2015 and 10/26/2025

Applicable State Requirement: 6 NYCRR 201-5.2 (c)

Item 14.1:

The owner or operator of a facility having an issued state facility permit shall submit a complete application at least 180 days, but not more than eighteen months, prior to the date of permit expiration for permit renewal purposes.

Condition 15: Compliance Demonstration Effective between the dates of 10/27/2015 and 10/26/2025

Applicable State Requirement: 6 NYCRR 201-5.3 (c)

Item 15.1:

The Compliance Demonstration activity will be performed for the Facility.

Item 15.2:

Compliance Demonstration shall include the following monitoring:

Monitoring Type: RECORD KEEPING/MAINTENANCE PROCEDURES Monitoring Description:

Any reports or submissions required by this permit shall be submitted to the Regional Air Pollution Control Engineer (RAPCE) at the following address:

Division of Air Resources NYS Dept. of Environmental Conservation Region 9 270 Michigan Ave. Buffalo, NY 14203

Reporting Requirements: ANNUALLY (CALENDAR) Reports due 30 days after the reporting period. The initial report is due 1/30/2016. Subsequent reports are due every 12 calendar month(s).

Condition 1: Air pollution prohibited



Permit ID: 9-2940-00204/00001 Facility DEC ID: 9294000204

Effective between the dates of 10/27/2015 and 10/26/2025

Applicable State Requirement: 6 NYCRR 211.1

Item 1.1:

No person shall cause or allow emissions of air contaminants to the outdoor atmosphere of such quantity, characteristic or duration which are injurious to human, plant or animal life or to property, or which unreasonably interfere with the comfortable enjoyment of life or property. Notwithstanding the existence of specific air quality standards or emission limits, this prohibition applies, but is not limited to, any particulate, fume, gas, mist, odor, smoke, vapor, pollen, toxic or deleterious emission, either alone or in combination with others.

**** Emission Unit Level ****

Condition 17: Emission Point Definition By Emission Unit Effective between the dates of 10/27/2015 and 10/26/2025

Applicable State Requirement: 6 NYCRR Subpart 201-5

Item 17.1:

The following emission points are included in this permit for the cited Emission Unit:

Emission Unit: 1-PROCS

Emission Point: 01000

Height (ft.): 30 Diameter (in.): 30

NYTMN (km.): 4781.048 NYTME (km.): 181.19 Building: MAIN

Emission Point: 02000

Height (ft.): 30 Diameter (in.): 48

NYTMN (km.): 4781.048 NYTME (km.): 181.19 Building: MAIN

Emission Point: 03000

Height (ft.): 30 Diameter (in.): 12

NYTMN (km.): 4781.048 NYTME (km.): 181.19 Building: MAIN

Condition 18: Process Definition By Emission Unit Effective between the dates of 10/27/2015 and 10/26/2025

Applicable State Requirement: 6 NYCRR Subpart 201-5

Item 18.1:

This permit authorizes the following regulated processes for the cited Emission Unit:

Emission Unit: 1-PROCS

Process: 001

Process Description:

Process 001 includes the production of polyurethane foam

Air Pollution Control Permit Conditions
Page 22 FINAL



seats. The Flexible polyurethane foam is produced by reacting a diisocyanate, polyol, and water. Flexible polyurethane foams are open-celled, permit the passage of air through the foam, and possess the strength and flexibility to allow repeated distortion or compression under stress with essentially complete recovery upon removal of the stress.

The process sources are subject to 6NYCRR Part 212 and 40CFR63 Subpart OOOOOO. The sources of emissions include the following:

TDI/MDI fugitive emissions from equipment leaks TDI/MDI fugitive emissions from tank filling and storage

TDI/MDI emissions from pouring foam ingredients into closed mold

TDI/MDI emissions from the de-mold process for potential upset conditions only

VOC/Phenol emissions from equipment and injection head cleaning using Mesamoll or similar

VOC/Particulate emissions from the spray application of mold release agents

CO2 and combustion emissions from the curing oven N2 emissions from cleaning/purging the molds VOC emissions from conditioning the molds with a wax paste

EP02000: The TDI/MDI emissions from the mold pouring and de-mold processes vent through emission point EP02000. In addition, the VOC/Phenol emissions from the equipment and injection head cleaning vent to EP02000. Activated carbon filters are used on this emission point to reduce TDI/MDI emissions by at least 90%.

EP01000: The spray application of mold release agents consists of two different products in order to reduce the VOC emissions from this source. A zero-VOC mold release agent is utilized on the lid, identified as Acmos 37-5812. The lids require more mold release agent since it contains more angles and typically is prone to sticking to the bowl. The bowl of the mold utilizes a solvent based mold release agent, identified as Rikeizai K-403K-45. This source is vented through emission point EP01000. This emission point operates with an overspray filter to capture 90% of the particulate emissions. No VOC emission controls are used at this source. The projected use of any new mold release agent in this process, such as a single low VOC cosolvent, must demonstrate compliance with Subpart 212 and satisfy any permit modification requirements prior to use.



Permit ID: 9-2940-00204/00001 Facility DEC ID: 9294000204

Emission Source/Control: 4CARB - Control

Control Type: ACTIVATED CARBON ADSORPTION

Emission Source/Control: 5FILT - Control

Control Type: FABRIC FILTER

Emission Source/Control: 1MRAS - Process

Emission Source/Control: 2POUR - Process

Emission Source/Control: 6OVEN - Process

Item 18.2:

This permit authorizes the following regulated processes for the cited Emission Unit:

Emission Unit: 1-PROCS

Process: 002 Process Description:

Process 002 includes the repair of finished polyurethane foam seats utilizing a hot melt adhesive. In accordance with 6NYCRR Part 228-2, Table 1 for "Adhesives Applied to Porous Material", the corresponding VOC content limit for the hot melt adhesive is 120 g/l, as-applied. A method 24 analysis is required to demonstrate compliance with this requirement.

Emission Source/Control: 3GLUE - Process

Condition 19: Compliance Demonstration

Effective between the dates of 10/27/2015 and 10/26/2025

Applicable State Requirement: 6 NYCRR 212-2.1 (a)

Item 19.1:

The Compliance Demonstration activity will be performed for:

Emission Unit: 1-PROCS

Process: 001

Regulated Contaminant(s):

CAS No: 000101-68-8 METHYLENE BISPHENYL ISOCYANATE BENZENE, 2,4-DIISOCYANATO-1-METHYL-

Item 19.2:

Compliance Demonstration shall include the following monitoring:

Monitoring Type: RECORD KEEPING/MAINTENANCE PROCEDURES

Monitoring Description:

TDI AND MDI EMISSIONS PART 212 EVALUATION



- (1) The Flexible polyurethane foam is produced by reacting a diisocyanate, polyol, and water. The diisocyanate compounds used in producing the flexible polyurethane foam are toluene diisocyanate (TDI), and methylene diphenyl diisocyanate (MDI).
- (2) In accordance with Section 212-1.3, Table 1, an Environmental Rating of "A" is assigned to TDI and MDI. These highly toxic air contaminants are listed in Section 212-2.2 Table 2 as Diisocyante compounds and have a mass emission limit of 100 pounds per year.
- (3) The TDI and MDI maximum hourly emission rate potential from the molding process are 0.44 lb/hr and 0.00045 lb/hr, respectively. In accordance with Section 212-2.3, Table 4, the degree of air cleaning required for an A-rated contaminant with an emission rate potential between 0.1 lb/hr and 1 lb/hr is required to have a 90% degree of air cleaning. An activated carbon treatment system is used on emission point EP02000 to control TDI and MDI emissions from the molding and de-molding processes; thus, achieving greater than 90% removal efficiency.
- (4) Fugitive TDI and MDI are emitted from equipment leaks and storage tank losses at an estimated maximum annual rate of 111 lbs/yr or 0.0127 lb/hr. In accordance with Section 212-2.3, Table 4, the degree of air cleaning required for an A-rated contaminant with an emission rate potential less than 0.1 lb/hr is governed by the guideline concentration for the contaminant and through use of air dispersion modeling. The combined annual impact from the molding process and fugitive emissions were evaluated using air dispersion modeling. Based on the analysis and Table 2 mass emission limit, an equipment inspection, monitoring and repair program is required.

Monitoring Frequency: UPON PERMIT RENEWAL

Reporting Requirements: UPON REQUEST BY REGULATORY AGENCY

Condition 20: Compliance Demonstration

Effective between the dates of 10/27/2015 and 10/26/2025

Applicable State Requirement: 6 NYCRR 212-2.1 (a)

Item 20.1:

The Compliance Demonstration activity will be performed for:

Emission Unit: 1-PROCS

Process: 001

Regulated Contaminant(s):



Permit ID: 9-2940-00204/00001 Facility DEC ID: 9294000204

CAS No: 000101-68-8 METHYLENE BISPHENYL ISOCYANATE
CAS No: 000584-84-9 BENZENE, 2,4-DIISOCYANATO-1-METHYL-

Item 20.2:

Compliance Demonstration shall include the following monitoring:

Monitoring Type: RECORD KEEPING/MAINTENANCE PROCEDURES Monitoring Description:

TDI EQUIPMENT INSPECTION AND REPAIR PROGRAM

- (1) TDI and MDI are emitted from the molding and de-mold process, equipment leaks and storage tank losses in excess of 100 pounds per year, as specified in Section 212-2.2, Table 2. In accordance with Section 212-2.3, Table 4, air dispersion modeling was completed to compare facility TDI and MDI emission estimates with the Short-term Guideline Concentration (SGC) and the Annual Guideline Concentration. Based on the analysis and Table 2 mass emission limit, an equipment inspection, monitoring and repair program is required.
- (2) Bridgestone has indicated the equipment leak emission estimates are a worst case scenario. Bridgestone intends to use sealless pumps, welded fittings and/or other leak-free components as much as practical to reduce equipment losses of TDI and MDI.
- (3) Bridgestone intends to implement a standard equipment inspection program which requires the working environment to be equipped with TDI monitors sensitive to one part per billion.
- (4) In addition, Bridgestone shall submit for approval a written monitoring program to document the inspection and maintenance of TDI/MDI equipment leaks and other potential sources of uncaptured TDI and MDI emissions. The program shall: (a) identify equipment components including but not limited to valves, pumps, storage tanks and other TDI/MDI sources to be monitored, (b) determine an action level, (c) specify the method of monitoring, instrumentation and calibration of equipment, (d) specify the monitoring frequency and repair schedule, and (e) maintenance of records to document program implementation.
- (5) Bridgestone shall submit the monitoring program for review and approval to the department prior to startup of the facility.

Monitoring Frequency: AS REQUIRED - SEE PERMIT MONITORING DESCRIPTION

Reporting Requirements: AS REQUIRED - SEE MONITORING DESCRIPTION



Condition 22: Compliance Demonstration Effective between the dates of 10/27/2015 and 10/26/2025

Applicable State Requirement: 6 NYCRR 212-2.1 (a)

Item 22.1:

The Compliance Demonstration activity will be performed for:

Emission Unit: 1-PROCS Emission Point: 02000

Process: 001

Regulated Contaminant(s):

CAS No: 000101-68-8 METHYLENE BISPHENYL ISOCYANATE CAS No: 000584-84-9 BENZENE, 2,4-DIISOCYANATO-1-METHYL-

Item 22.2:

Compliance Demonstration shall include the following monitoring:

Monitoring Type: INTERMITTENT EMISSION TESTING

Monitoring Description:

ROUTINE PERFORMANCE TESTING

- (1) A performance test to demonstrate compliance with the required 90 percent control efficiency of TDI and MDI emissions across the activated carbon system must be completed within 60 days after achieving the maximum production rate but not later than 180 days after initial start-up.
- (2) The performance test must be conducted at the maximum normal operating process load during the three-run performance test.
- (3) The inlet and outlet concentration level of total organic compounds across the carbon adsorption system shall be determined using 40 CFR part 60, Appendix A, Method 25A, reported as propane. Alternatively, the inlet and outlet concentration of TDI and MDI shall be determined using a method approved by the department.
- (4) A performance test protocol shall be submitted to the Department for approval at least 60 days prior to completion of the test. The Department must be notified 10 days prior to the scheduled test date so a Department representative may be present during the test.
- (5) The results of the performance test shall be submitted to the Department within 60 days following completion of the performance test.



Permit ID: 9-2940-00204/00001 Facility DEC ID: 9294000204

(6) Subsequent performance test requirements will be at the discretion of the Department based on design, operation and maintenance practices used to minimize the impact of excess emissions on ambient air quality, the environment and human health.

Parameter Monitored: VOC

Lower Permit Limit: 90 percent degree of air cleaning or

greater

Reference Test Method: EPA Method 25A or other approved method Monitoring Frequency: AS REQUIRED - SEE PERMIT MONITORING DESCRIPTION

Averaging Method: AVERAGING METHOD AS PER REFERENCE TEST

METHOD INDICATED

Reporting Requirements: AS REQUIRED - SEE MONITORING DESCRIPTION

Condition 23: Compliance Demonstration Effective between the dates of 10/27/2015 and 10/26/2025

Applicable State Requirement: 6 NYCRR 212-2.1 (a)

Item 23.1:

The Compliance Demonstration activity will be performed for:

Emission Unit: 1-PROCS Emission Point: 02000

Process: 001

Regulated Contaminant(s):

CAS No: 000101-68-8 METHYLENE BISPHENYL ISOCYANATE CAS No: 000584-84-9 BENZENE, 2,4-DIISOCYANATO-1-METHYL-

Item 23.2:

Compliance Demonstration shall include the following monitoring:

Monitoring Type: RECORD KEEPING/MAINTENANCE PROCEDURES Monitoring Description:

MONITORING REQUIREMENTS FOR CARBON ADSORPTION SYSTEM

- (1) Emission point EP02000 shall be equipped with a carbon adsorption system that routes collected vapors from the molding and de-mold process through activated carbon before being discharged to the atmosphere.
- (2) Bridgestone shall develop a monitoring program to ensure carbon breakthrough does not occur. The monitoring shall be at a frequency to give reasonable assurance breakthrough or channeling does not occur. Bridgestone shall submit a monitoring plan to the department for approval prior to start-up of the facility.



Permit ID: 9-2940-00204/00001 Facility DEC ID: 9294000204

- (3) Bridgestone will determine the carbon replacement interval using a design analysis described below in paragraphs (i) through (iii):
- (i) The design analysis shall consider the vent stream composition, constituent concentration, flow rate, relative humidity, and temperature.
- (ii) The design analysis shall establish the outlet organic concentration level, the capacity of the carbon bed, and the working capacity of activated carbon used for the carbon bed, and
- (iii) The design analysis shall establish the carbon replacement interval based on the total carbon working capacity of the carbon adsorption system and the process emission rate established during the performance test. Documentation of the carbon replacement interval must be made available upon request.
- (4) Bridgestone shall maintain records of dates and times when the carbon adsorption system is monitored for carbon breakthrough and the monitoring device reading in accordance with the approved monitoring plan.
- (5) Bridgestone shall maintain records of the date when the existing carbon in the carbon adsorption system is replaced with fresh carbon.

Monitoring Frequency: AS REQUIRED - SEE PERMIT MONITORING DESCRIPTION

Reporting Requirements: AS REQUIRED - SEE MONITORING DESCRIPTION



Permit ID: 9-2940-00204/00001 Facility DEC ID: 9294000204