



State of Ohio Environmental Protection Agency

Street Address:

Lazarus Gov. Center
122 S. Front Street
Columbus, OH 43215

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Lazarus Gov. Center
P.O. Box 1049
Columbus, OH 43216-1049

03/16/01

CERTIFIED MAIL

RE: Draft Title V Chapter 3745-77 permit

16-77-11-0026
Morgan Adhesives Company (MACtac)
Tim W. Owens
4560 Darrow Road
Stow, OH 44224

Dear Tim W. Owens:

You are hereby notified that the Ohio Environmental Protection Agency has prepared the enclosed draft of the Title V permit for the facility referenced above. The purpose of this draft is to solicit public comments. A public notice concerning the draft will appear in the Ohio EPA Weekly Review and the major newspaper in the county where the facility is located. Comments and/or a request for a public hearing from the public and any affected parties will be accepted by Akron Air Pollution Control within 30 days of the date of publication in the newspaper. You will be notified in writing if a public hearing is scheduled.

A decision on processing the Title V permit will be made after consideration of written public comments and oral testimony (if a public hearing is conducted). After the comment period, you will be provided with a Preliminary Proposed Title V permit and an opportunity to comment prior to the Proposed Title V permit submittal to USEPA.

If you have any questions or comments concerning this draft Title V permit, please contact Akron Air Pollution Control.

Very truly yours,

Thomas G. Rigo, Manager
Field Operations and Permit Section
Division of Air Pollution Control

cc: USEPA (electronically submitted)
Michael Ahern, DAPC PMU
Akron Air Pollution Control
Pennsylvania
West Virginia



Ohio EPA

State of Ohio Environmental Protection Agency

DRAFT TITLE V PERMIT

Issue Date: 03/16/01

Effective Date: To be entered upon final issuance

Expiration Date: To be entered upon final issuance

This document constitutes issuance to:

Morgan Adhesives Company (MACtac)
4560 Darrow Road
Stow, OH 44224

of a Title V permit for Facility ID: 16-77-11-0026

Emissions Unit ID (Company ID)/

Emissions Unit Activity Description:

B015 (N-Line Boiler (B-9))

10,150,000 BTU/hr input thermal oil heater for coating lines, M, N, L

K003 (Coating Line D)

Coating Line D. Pressure sensitive coater capable of coating solvent and water

based adhesives, solvent releases, water-based inks, solvent or water-based primers and topcoats. Primarily sheet but also technical products coated. All release coatings are recoverable. Adhesives can be recoverable or non-recoverable types. Primers, topcoats and inks are not recovered. All ovens combined rated at 4,100,000 BTU/hr.

K004 (Coating Line E)

Coating Line E. Pressure sensitive coater that coats solvent based adhesives and releases. Sheet products. All coatings are recovered. All ovens combined rated at 3,000,000 BTU/hr.

K005 (Coating Line F)

Coating Line F. Pressure sensitive coater that is capable of coating water and solvent based adhesives, solvent based releases, water or solvent based primers and water based inks. Primarily sheet but occasionally technical products coated. All release coatings are recoverable. Adhesives can be recoverable or non-recoverable. Inks and primers are not recovered. All ovens combined rated at 4,100,000 BTU/hr.

K006 (Coating Line G)

Coating Line G. Pressure sensitive coater for technical products. Predominately solvent based coatings. All but one release coating are recovered. Adhesive coatings will be controlled via a catalytic oxidizer starting around 02/01/96. All ovens combined rated at 3,000,000 BTU/hr.

K007 (Coating Line H/I)

Coating Line H/I. Pressure sensitive coater capable of coating solvent based adhesives, solvent releases, solvent or water-based primers and topcoats. Primarily sheet and technical products coated. All release coatings are recoverable. Adhesives can be recoverable or non-recoverable types. Coater has two ovens and has capability of coating both sides of web. H-line ovens rated at 2,250,000 BTU/hr. I-line oven rated at 1,625,000 BTU/hr.

K008 (Coating Line J)

Coating Line J. Pressure sensitive coater for technical products. Primarily solvent based adhesive coatings, but some water based coatings. Adhesives and releases are coated. All releases are solvent based. Adhesive coatings will be controlled via a catalytic oxidizer starting around 02/01/96. Release coatings will be controlled via the solvent recovery system beginning 02/01/96. All ovens combined rated at 18,000,000 BTU/hr.

K009 (Coating Line K)

Coating Line K. Pressure sensitive coater for technical products. Solvent and water based coatings. Adhesives will be routed to catalytic oxidizer around 02/01/96. Solvent based release coatings are routed to a solvent recovery system. Water based inks are discharged to atmosphere; solvent based inks will be controlled via a catalytic oxidizer beginning 02/01/96. Ovens heated by thermal oil system.

K011 (Coating Line N)

Coating Line N. Hot melt adhesive and solventless silicone coater. Release ovens rated at 4,000,000 BTU/hr.

K014 (Coating Line L)

Coating Line L. Pressure sensitive coater for roll label products. Water based and hot melt adhesives and solventless silicones are applied. Hot melt coating capabilities added 08/91. All ovens combined rated at 13,500,000 BTU/hr.

You will be contacted approximately eighteen (18) months prior to the expiration date regarding the renewal of this permit. If you are not contacted, please contact the appropriate Ohio EPA District Office or local air agency listed below. This permit and the authorization to operate the air contaminant sources (emissions units) at this facility shall expire at midnight on the expiration date shown above. If a renewal permit is not issued prior to the expiration date, the permittee may continue to operate pursuant to OAC rule 3745-77-04(A) and in accordance with the terms of this permit beyond the expiration date, provided that a complete renewal application is submitted no earlier than eighteen (18) months and no later than one-hundred eighty (180) days prior to the expiration date.

Described below is the current Ohio EPA District Office or local air agency that is responsible for processing and administering your Title V permit:

Akron Air Pollution Control
146 South High Street, Room 904
Akron, OH 44308
(330) 375-2480

OHIO ENVIRONMENTAL PROTECTION AGENCY

Christopher Jones
Director

PART I - GENERAL TERMS AND CONDITIONS

A. State and Federally Enforceable Section

1. Monitoring and Related Recordkeeping and Reporting Requirements

- a. Except as may otherwise be provided in the terms and conditions for a specific emissions unit, the permittee shall maintain records that include the following, where applicable, for any required monitoring under this permit:
 - i. The date, place (as defined in the permit), and time of sampling or measurements.
 - ii. The date(s) analyses were performed.
 - iii. The company or entity that performed the analyses.
 - iv. The analytical techniques or methods used.
 - v. The results of such analyses.
 - vi. The operating conditions existing at the time of sampling or measurement.
- b. Each record of any monitoring data, testing data, and support information required pursuant to this permit shall be retained for a period of five years from the date the record was created. Support information shall include all calibration and maintenance records and all original strip-chart recordings for continuous monitoring instrumentation, and copies of all reports required by this permit. Such records may be maintained in computerized form.
- c. Except as may otherwise be provided in the terms and conditions for a specific emissions unit, the permittee shall submit required reports in the following manner:
 - i. Reports of any required monitoring and/or recordkeeping information shall be submitted to the appropriate Ohio EPA District Office or local air agency.
 - ii. Quarterly written reports of (i) any deviations from federally enforceable emission limitations, operational restrictions, and control device operating parameter limitations, excluding deviations resulting from malfunctions reported in accordance with OAC rule 3745-15-06, that have been detected by the testing, monitoring and recordkeeping requirements specified in this permit, (ii) the probable cause of such deviations, and (iii) any corrective actions or preventive measures taken, shall be promptly made to the appropriate Ohio EPA District Office or local air agency. These quarterly written reports shall satisfy the requirements of OAC rule 3745-77-07(A)(3)(c)(i) and (ii) pertaining to the submission of monitoring reports every six months and OAC rule 3745-77-07(A)(3)(c)(iii) pertaining to the prompt reporting of all deviations except malfunctions, which shall be reported in accordance with OAC rule 3745-15-06. The written reports shall be submitted quarterly, i.e., by January 31, April 30, July 31, and October 31 of each year and shall cover the previous calendar quarters. (These quarterly reports shall exclude deviations resulting from malfunctions reported in accordance with OAC rule 3745-15-06.) See B.8 below if no deviations occurred during the quarter.
 - iii. Written reports, which identify any deviations from the federally enforceable monitoring, recordkeeping, and reporting requirements contained in this permit shall be submitted to the appropriate Ohio EPA District Office or local air agency every six months, i.e., by January 31 and July 31 of each year for the previous six calendar months. These semi-

annual written reports shall satisfy the requirements of OAC rule 3745-77-07(A)(3)(c)(i) and (ii) pertaining to the reporting of any deviations related to the monitoring, recordkeeping, and reporting requirements. If no deviations occurred during a six-month period, the permittee shall submit a semi-annual report, which states that no deviations occurred during that period.

- iv. Each written report shall be signed by a responsible official certifying that, based on information and belief formed after reasonable inquiry, the statements and information in the report are true, accurate, and complete.

2. Scheduled Maintenance/Malfunction Reporting

Any scheduled maintenance of air pollution control equipment shall be performed in accordance with paragraph (A) of OAC rule 3745-15-06. The malfunction, i.e., upset, of any emissions units or any associated air pollution control system(s) shall be reported to the appropriate Ohio EPA District Office or local air agency in accordance with paragraph (B) of OAC rule 3745-15-06. (The definition of an upset condition shall be the same as that used in OAC rule 3745-15-06(B)(1) for a malfunction.) The verbal and written reports submitted pursuant to OAC rule 3745-15-06 shall satisfy the requirements of OAC rule 3745-77-07(A)(3)(c)(iii) pertaining to the prompt reporting of deviations caused by malfunctions or upsets.

Except as provided in that rule, any scheduled maintenance or malfunction necessitating the shutdown or bypassing of any air pollution control system(s) shall be accompanied by the shutdown of the emission unit(s) that is (are) served by such control system(s).

3. Risk Management Plans

If the permittee is required to develop and register a risk management plan pursuant to section 112(r) of the Clean Air Act, as amended, 42 U.S.C. 7401 et seq. ("Act"), the permittee shall comply with the requirement to register such a plan.

4. Title IV Provisions

If the permittee is subject to the requirements of 40 CFR Part 72 concerning acid rain, the permittee shall ensure that any affected emissions unit complies with those requirements. Emissions exceeding any allowances that are lawfully held under Title IV of the Act, or any regulations adopted thereunder, are prohibited.

5. Severability Clause

A determination that any term or condition of this permit is invalid shall not invalidate the force or effect of any other term or condition thereof, except to the extent that any other term or condition depends in whole or in part for its operation or implementation upon the term or condition declared invalid.

6. General Requirements

- a. The permittee must comply with all terms and conditions of this permit. Any noncompliance with the federally enforceable terms and conditions of this permit constitutes a violation of the

Act, and is grounds for enforcement action or for permit revocation, revocation and reissuance, or modification, or for denial of a permit renewal application.

- b. 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 in order to maintain compliance with the federally enforceable terms and conditions of this permit.
- c. This permit may be modified, reopened, revoked, or revoked and reissued, for cause. The filing of a request by the permittee for a permit modification, revocation and reissuance, or revocation, or of a notification of planned changes or anticipated noncompliance does not stay any term and condition of this permit.
- d. This permit does not convey any property rights of any sort, or any exclusive privilege.
- e. The permittee shall furnish to the Director of the Ohio EPA, or an authorized representative of the Director, upon receipt of a written request and within a reasonable time, any information that may be requested to determine whether cause exists for modifying, reopening or revoking this permit or to determine compliance with this permit. Upon request, the permittee shall also furnish to the Director or an authorized representative of the Director, copies of records required to be kept by this permit. For information claimed to be confidential in the submittal to the Director, if the Administrator of the U.S. EPA requests such information, the permittee may furnish such records directly to the Administrator along with a claim of confidentiality.

7. Fees

The permittee shall pay fees to the Director of the Ohio EPA in accordance with ORC section 3745.11 and OAC Chapter 3745-78.

8. Marketable Permit Programs

No revision of this permit is required under any approved economic incentive, marketable permits, emissions trading, and other similar programs or processes for changes that are provided for in this permit.

9. Reasonably Anticipated Operating Scenarios

The permittee is hereby authorized to make changes among operating scenarios authorized in this permit without notice to the Ohio EPA, but, contemporaneous with making a change from one operating scenario to another, the permittee must record in a log at the permitted facility the scenario under which the permittee is operating. The permit shield provided in these general terms and conditions shall apply to all operating scenarios authorized in this permit.

10. Reopening for Cause

This Title V permit will be reopened prior to its expiration date under the following conditions:

- a. Additional applicable requirements under the Act become applicable to one or more emissions units covered by this permit, and this permit has a remaining term of three or more years. Such a reopening shall be completed not later than eighteen months after promulgation of the applicable requirement. No such reopening is required if the effective date of the requirement is later than the date on which the permit is due to expire, unless the original permit or any of its terms and conditions has been extended pursuant to paragraph (E)(1) of OAC rule 3745-77-08.
- b. This permit is issued to an affected source under the acid rain program and additional requirements (including excess emissions requirements) become applicable. Upon approval by the Administrator, excess emissions offset plans shall be deemed to be incorporated into the permit, and shall not require a reopening of this permit.
- c. The Director of the Ohio EPA or the Administrator of the U.S. EPA determines that the federally applicable requirements in this permit are based on a material mistake, or that inaccurate statements were made in establishing the emissions standards or other terms and conditions of this permit related to such federally applicable requirements.
- d. The Administrator of the U.S. EPA or the Director of the Ohio EPA determines that this permit must be revised or revoked to assure compliance with the applicable requirements.

11. Federal and State Enforceability

Only those terms and conditions designated in this permit as federally enforceable, that are required under the Act, or any of its applicable requirements, including relevant provisions designed to limit the potential to emit of a source, are enforceable by the Administrator of the U.S. EPA, the State, and citizens under the Act. All other terms and conditions of this permit shall not be federally enforceable and shall be enforceable under State law only.

12. Compliance Requirements

- a. Any document (including reports) required to be submitted and required by a federally applicable requirement in this Title V permit shall include a certification by a responsible official that, based on information and belief formed after reasonable inquiry, the statements in the document are true, accurate, and complete.
- b. Upon presentation of credentials and other documents as may be required by law, the permittee shall allow the Director of the Ohio EPA or an authorized representative of the Director to:
 - i. At reasonable times, enter upon the permittee's premises where a source is located or the emissions-related activity is conducted, or where records must be kept under the conditions of this permit.

- ii. Have access to and copy, at reasonable times, any records that must be kept under the conditions of this permit, subject to the protection from disclosure to the public of confidential information consistent with paragraph (E) of OAC rule 3745-77-03.
 - iii. Inspect at reasonable times any facilities, equipment (including monitoring and air pollution control equipment), practices, or operations regulated or required under this permit.
 - iv. As authorized by the Act, sample or monitor at reasonable times substances or parameters for the purpose of assuring compliance with the permit and applicable requirements.
- c. The permittee shall submit progress reports to the appropriate Ohio EPA District Office or local air agency concerning any schedule of compliance for meeting an applicable requirement. Progress reports shall be submitted semiannually, or more frequently if specified in the applicable requirement or by the Director of the Ohio EPA. Progress reports shall contain the following:
- i. Dates for achieving the activities, milestones, or compliance required in any schedule of compliance, and dates when such activities, milestones, or compliance were achieved.
 - ii. An explanation of why any dates in any schedule of compliance were not or will not be met, and any preventive or corrective measures adopted.
- d. Compliance certifications concerning the terms and conditions contained in this permit that are federally enforceable emission limitations, standards, or work practices, shall be submitted to the appropriate Ohio EPA District Office or local air agency in the following manner and with the following content:
- i. Compliance certifications shall be submitted annually on a calendar year basis. The annual certification shall be submitted on or before April 30th of each year during the permit term.
 - ii. Compliance certifications shall include the following:
 - (a) An identification of each term or condition of this permit that is the basis of the certification.
 - (b) The permittee's current compliance status.
 - (c) Whether compliance was continuous or intermittent.
 - (d) The method(s) used for determining the compliance status of the source currently and over the required reporting period.
 - (e) Such other facts as the Director of the Ohio EPA may require in the permit to determine the compliance status of the source.
 - iii. Compliance certifications shall contain such additional requirements as may be specified pursuant to sections 114(a)(3) and 504(b) of the Act.

13. Permit Shield

- a. Compliance with the terms and conditions of this permit (including terms and conditions established for alternate operating scenarios, emissions trading, and emissions averaging, but excluding terms and conditions for which the permit shield is expressly prohibited under OAC

rule 3745-77-07) shall be deemed compliance with the applicable requirements identified and addressed in this permit as of the date of permit issuance.

- b. This permit shield provision shall apply to any requirement identified in this permit pursuant to OAC rule 3745-77-07(F)(2), as a requirement that does not apply to the source or to one or more emissions units within the source.

14. Operational Flexibility

The permittee is authorized to make the changes identified in OAC rule 3745-77-07(H)(1)(a) to (H)(1)(c) within the permitted stationary source without obtaining a permit revision, if such change is not a modification under any provision of Title I of the Act [as defined in OAC rule 3745-77-01(JJ)], and does not result in an exceedance of the emissions allowed under this permit (whether expressed therein as a rate of emissions or in terms of total emissions), and the permittee provides the Administrator of the U.S. EPA and the appropriate Ohio EPA District Office or local air agency with written notification within a minimum of seven days in advance of the proposed changes, unless the change is associated with, or in response to, emergency conditions. If less than seven days notice is provided because of a need to respond more quickly to such emergency conditions, the permittee shall provide notice to the Administrator of the U.S. EPA and the appropriate District Office of the Ohio EPA or local air agency as soon as possible after learning of the need to make the change. The notification shall contain the items required under OAC rule 3745-77-07(H)(2)(d).

15. Emergencies

The permittee shall have an affirmative defense of emergency to an action brought for noncompliance with technology-based emission limitations if the conditions of OAC rule 3745-77-07(G)(3) are met. This emergency defense provision is in addition to any emergency or upset provision contained in any applicable requirement.

16. Off Permit Changes

The owner or operator of a Title V source may make any change in its operations or emissions at the source that is not specifically addressed or prohibited in the Title V permit, without obtaining an amendment or modification of the permit, provided that the following conditions are met:

- a. The change does not result in conditions that violate any applicable requirements or that violate any existing federally enforceable permit term or condition;
- b. The permittee provides contemporaneous written notice of the change to the director and the administrator, except that no such notice shall be required for changes that qualify as insignificant emission levels or activities as defined in OAC rule 3745-77-01(U). Such written notice shall describe each such change, the date of such change, any change in emissions or pollutants emitted, and any federally applicable requirement that would apply as a result of the change;
- c. The change shall not qualify for the permit shield under OAC rule 3745-77-07(F);

- d. The permittee shall keep a record describing all changes made at the source that result in emissions of a regulated air pollutant subject to an applicable requirement, but not otherwise regulated under the permit, and the emissions resulting from those changes; and
- e. The change is not subject to any applicable requirement under Title IV of the Act or is not a modification under any provision of Title I of the Act.

Paragraph (I) of rule 3745-77-07 of the Administrative Code applies only to modification or amendment of the permittee's Title V permit. The change made may require a permit to install under Chapter 3745-31 of the Administrative Code if the change constitutes a modification as defined in that Chapter. Nothing in paragraph (I) of rule 3745-77-07 of the Administrative Code shall affect any applicable obligation under Chapter 3745-31 of the Administrative Code.

(For further clarification, the permittee can refer to Engineering Guide #63 that is available in their STARSHIP software package.)

17. Compliance Method Requirements

Nothing in this permit shall alter or affect the ability of any person to establish compliance with, or a violation of, any applicable requirement through the use of credible evidence to the extent authorized by law. Nothing in this permit shall be construed to waive any defenses otherwise available to the permittee, including but not limited to, any challenge to the Credible Evidence Rule (see 62 Fed. Reg. 8314, Feb. 24, 1997), in the context of any future proceeding.

18. Insignificant Activity

Each insignificant activity that has one or more applicable requirements shall comply with those applicable requirements.

B. State Only Enforceable Section

1. Permit to Install Requirement

Prior to the “installation” or “modification” of any “air contaminant source,” as those terms are defined in OAC rule 3745-31-01, a permit to install must be obtained from the Ohio EPA pursuant to OAC Chapter 3745-31.

2. Reporting Requirements Related to Monitoring and Recordkeeping Requirements

The permittee shall submit required reports in the following manner:

- a. Reports of any required monitoring and/or recordkeeping information shall be submitted to the appropriate Ohio EPA District Office or local air agency.
- b. Except as otherwise may be provided in the terms and conditions for a specific emissions unit, quarterly written reports of (a) any deviations (excursions) from emission limitations, operational restrictions, and control device operating parameter limitations that have been detected by the testing, monitoring, and recordkeeping requirements specified in this permit, (b) the probable cause of such deviations, and (c) any corrective actions or preventive measures which have been or will be taken, shall be submitted to the appropriate Ohio EPA District Office or local air agency. If no deviations occurred during a calendar quarter, the permittee shall submit a quarterly report, which states that no deviations occurred during that quarter. The reports shall be submitted quarterly, i.e., by January 31, April 30, July 31, and October 31 of each year and shall cover the previous calendar quarters. (These quarterly reports shall exclude deviations resulting from malfunctions reported in accordance with OAC rule 3745-15-06.)

3. Records Retention Requirements

Each record of any monitoring data, testing data, and support information required pursuant to this permit shall be retained for a period of five years from the date the record was created. Support information shall include, but not be limited to, all calibration and maintenance records and all original strip-chart recordings for continuous monitoring instrumentation, and copies of all reports required by this permit. Such records may be maintained in computerized form.

4. Inspections and Information Requests

The Director of the Ohio EPA, or an authorized representative of the Director, may, subject to the safety requirements of the permittee and without undue delay, enter upon the premises of this source at any reasonable time for purposes of making inspections, conducting tests, examining records or reports pertaining to any emission of air contaminants, and determining compliance with any applicable State air pollution laws and regulations and the terms and conditions of this permit. The permittee shall furnish to the Director of the Ohio EPA, or an authorized representative of the Director, upon receipt of a written request and within a reasonable time, any information that may be requested to determine whether cause exists for modifying, reopening or revoking this permit or to determine compliance with this permit. Upon verbal or written request, the permittee shall also furnish to the Director of the Ohio EPA, or an authorized representative of the Director, copies of records required to be kept by this permit.

5. Scheduled Maintenance/Malfunction Reporting

Any scheduled maintenance of air pollution control equipment shall be performed in accordance with paragraph (A) of OAC rule 3745-15-06. The malfunction of any emissions units or any associated air pollution control system(s) shall be reported to the appropriate Ohio EPA District Office or local air agency in accordance with paragraph (B) of OAC rule 3745-15-06. Except as provided in that rule, any scheduled maintenance or malfunction necessitating the shutdown or bypassing of any air pollution control system(s) shall be accompanied by the shutdown of the emissions unit(s) that is (are) served by such control system(s).

6. Permit Transfers

Any transferee of this permit shall assume the responsibilities of the prior permit holder. The appropriate Ohio EPA District Office or local air agency must be notified in writing of any transfer of this permit.

7. Air Pollution Nuisance

The air contaminants emitted by the emissions units covered by this permit shall not cause a public nuisance, in violation of OAC rule 3745-15-07.

8. Additional Reporting Requirements When There Are No Deviations of Federally Enforceable Emission Limitations, Operational Restrictions, or Control Device Operating Parameter Limitations (See Section A of This Permit)

If no deviations occurred during a calendar quarter, the permittee shall submit a quarterly report, which states that no deviations occurred during that quarter. The reports shall be submitted quarterly, i.e., by January 31, April 30, July 31, and October 31 of each year and shall cover the previous calendar quarters.

Part II - Specific Facility Terms and Conditions

A. State and Federally Enforcable Section

1. This facility is subject to the applicable requirements specified in OAC Chapter 3745-25. In accordance with Ohio EPA Engineering Guide #64, the emission control action programs, as specified in OAC rule 3745-25-03, shall be developed and submitted within 60 days after receiving notification from the Ohio EPA.

B. State Only Enforceable Section

1. The following insignificant emissions units are located at this facility:

B. State Only Enforceable Section (continued)

B002 - R-Line Boiler (B-7) - 5,997,000 Btu/hr;
B018 - Industrial Reliance Boiler (B-12) - 8,400,000 Btu/hr;
B019 - Industrial Reliance Boiler (B-13) - 8,400,000 Btu/hr;
B020 - Industrial Reliance Boiler (B-14) - 8,400,000 Btu/hr;
Z001 - R&D Pilot Coater;
Z002 - Mixing Tank A-1 Cmpd Room A, 1100-gal;
Z003 - Mixing Tank A-2 Cmpd Room A, 1100-gal;
Z004 - Mixing Tank A-3 Cmpd Room A, 1100-gal;
Z005 - Mixing Tank A-4 Cmpd Room A, 1100-gal;
Z006 - Mixing Tank A-5 Cmpd Room A, 1100-gal;
Z007 - Mixing Tank A-6 Cmpd Room A, 1100-gal;
Z008 - Mixing Tank A-7 Cmpd Room A, 1100-gal;
Z009 - Mixing Tank A-8 Cmpd Room A, 1100-gal;
Z010 - Feed Tank A-9 Cmpd Room A, 1100-gal;
Z011 - Feed Tank A-10 Cmpd Room A, 1100-gal;
Z012 - Feed Tank A-11 Cmpd Room A, 1100-gal;
Z013 - Feed Tank A-12 Cmpd Room A, 1100-gal;
Z014 - Compound Room R;
Z015 - Underground Storage Tank T01, 10,000-gal;
Z016 - Underground Storage Tank T02, 10,000-gal;
Z017 - Underground Storage Tank T03, 10,000-gal;
Z018 - Underground Storage Tank T04 10,000-gal;
Z019 - Underground Storage Tank T05, 10,000-gal;
Z020 - Underground Storage Tank T06, 10,000-gal;
Z021 - Mixing Tank B-1 Cmpd Room B, 1100-gal;
Z022 - Mixing Tank B-2 Cmpd Room B, 1100-gal;
Z023 - Mixing Tank B-3 Cmpd Room B, 1100-gal;
Z024 - Mixing Tank B-4 Cmpd Room B, 1100-gal;
Z025 - Mixing Tank B-5 Cmpd Room B, 1100-gal;
Z026 - Mixing Tank B-6 Cmpd Room B, 1100-gal;
Z027 - Mixing Tank B-7 Cmpd Room B, 1100-gal;
Z028 - Mixing Tank B-8 Cmpd Room B, 1100-gal;
Z029 - Mixing Tank B-9 Cmpd Room B, 1700-gal;
Z030 - Storage Tank C-7 Cmpd Room B-Annex, 5900-gal;
Z031 - Storage Tank C-8 Cmpd Room B-Annex, 5900-gal;
Z032 - Storage Tank C-9 Cmpd Room B-Annex, 5900-gal;
Z033 - Rubber Grinder;
Z034 - Storage Tank C-10 Cmpd Room B-Annex;
Z035 - Storage Tank C-1 Cmpd Room C, 1530-gal;
Z036 - Storage Tank C-2 Cmpd Room C, 1530-gal;

B. State Only Enforceable Section (continued)

Z037 - Storage Tank C-11 Cmpd Room C-Annex, 5500-gal;
Z038 - Storage Tank C-12 Cmpd Room C-Annex, 5500-gal;
Z039 - Storage Tank C-13 Cmpd Room C-Annex, 5500-gal;
Z040 - Storage Tank C-14 Cmpd Room C-Annex, 5500-gal;
Z041 - Storage Tank C-15 Cmpd Room C-Annex, 5500-gal;
Z042 - Storage Tank C-16 Cmpd Room C-Annex, 5500-gal;
Z043 - Storage Tank C-17 Cmpd Room C-Annex, 5500-gal;
Z044 - Storage Tank C-18 Cmpd Room C-Annex, 5500-gal;
Z045 - Compound Room R;
Z046 - DCI Distillation Unit;
Z047 - Storage Tank V-2, 500-gal;
Z048 - Storage Tank V-3, 1100-gal;
Z049 - Storage Tank V-4, 1100-gal;
Z050 - Gravure Roll/Mayer Rod Cleaning Station, CS-1;
Z051 - Solvent Recovery Decanter Tank, D-4;
Z052 - Solvent Recovery Dirty Solvent Collection Tank, D-5;
Z053 - Solvent Recovery Seal Tank, D-7;
Z054 - Solvent Recovery - Dirty Solvent Feed Tank, D-8;
Z055 - PRI Distillation Unit, P-3;
Z056 - Distilled Solvent Collection and Feed Tank, D10;
Z057 - Laboratory Environmental Test Chambers;
Z058 - Laboratory Fume Hood-Casting Room;
Z059 - Laboratory Benchtop UV Curing Oven;
Z060 - Environmental Test Chambers (2);
Z061 - R&C Test Oven;
Z062 - Pilot Plant Cleaning/Testing Bench;
Z063 - R&D Hot Melt Adhesive Mixer, and Coater;
Z064 - R&D Corona Treater;
Z065 - R&D Screen Printing Unit;
Z066 - R&D Casting Room Ovens;
Z067 - QA Lab Fume Hood and Test Ovens;
Z068 - QA Lab Fume Hood and Test Oven;
Z069 - QA Lab Ovens;
Z070 - Bottling Cage;
Z071 - Welding Hood - Maintenance;
Z072 - Hot Melt Solids Feed Hopper;
Z073 - Hot Melt Melter/Mixer;
Z074 - Burnham Hot Water Boiler B-1, 1,326,000 Btu/hr;
Z075 - Burnham Hot Water Boiler B-2, 1,326,000 Btu/hr;
Z076 - American Standard Hot Water Boiler B-3, 780,000 Btu/hr;
Z077 - Underground Storage Tank T-01, 10,000-gal;
Z078 - Underground Storage Tank T-02, 10,000-gal;
Z079 - Underground Storage Tank T-03, 10,000-gal;
Z080 - Underground Storage Tank T-04, 10,000-gal;

Facility Name: **Morgan Adhesives Company (MACtac)**
Facility ID: **16-77-11-0026**

B. State Only Enforceable Section (continued)

Z081 - Underground Storage Tank T-05, 10,000-gal; and
Z082 - Underground Storage Tank T-06, 10,000-gal.

Each insignificant emissions unit at this facility must comply with all applicable State and federal regulations, as well as any emission limitations and/or control requirements contained within a permit to install for the emissions unit.

Facility Name: **Morgan Adhesives Company (MActac)**

Facility ID: **16-77-11-0026**

Emissions Unit: **N-Line Boiler (B-9) (B015)**

Part III - Terms and Conditions for Emissions Units

Emissions Unit ID: N-Line Boiler (B-9) (B015)

Activity Description: 10,150,000 BTU/hr input thermal oil heater for coating lines, M, N, L

A. State and Federally Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

1. The specific operation(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be employed. Additional applicable emissions limitations and/or control measures (if any) may be specified in narrative form following the table.

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/ Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
N-line boiler (B-9) - natural gas-fired 10,150,000 Btu/hr thermal oil heater	OAC rule 3745-17-07(A)	Visible particulate emissions from any stack shall not exceed 20% opacity as a 6-minute average, except as provided by rule.
	OAC rule 3745-17-10(B)	.020 pound of particulate emissions per mmBtu of actual heat input
	OAC rule 3745-18-06	None, the provisions of this rule are not applicable to this emissions unit.
	OAC rule 3745-21-08(B)	None, see A.1.2 below.
	OAC rule 3745-23-06(B)	None, see A.1.2 below.

2. Additional Terms and Conditions

- 2.a The design of the emissions unit and the technology associated with the current operating practices will satisfy the "best available control techniques and operating practices" and "latest available control techniques and operating practices" required pursuant to OAC rules 3745-21-08 and 3745-23-06, respectively.

Facility Name: **Morgan Adhesives Company (MActac)**

Facility ID: **16-77-11-0026**

Emissions Unit: **N-Line Boiler (B-9) (B015)**

II. Operational Restrictions

1. The permittee shall burn only natural gas as fuel in this emissions unit.

III. Monitoring and/or Record Keeping Requirements

1. For each day during which the permittee burns a fuel other than natural gas, the permittee shall maintain a record of the type and quantity of fuel burned in this emissions unit.

IV. Reporting Requirements

1. The permittee shall submit quarterly deviation (excursion) reports that identify each day when a fuel other than natural gas was burned in this emissions unit. Each report shall be submitted within 30 days after the deviation occurs.

V. Testing Requirements

1. Compliance with the emission limitations in section A.I.1 of these terms and conditions shall be determined in accordance with the following methods:

1.a Emission Limitation:

Visible particulate emissions from any stack shall not exceed 20% opacity as a 6-minute average, except as provided by rule.

Applicable Compliance Method:

Compliance shall be demonstrated through visible emissions observations performed in accordance with 40 CFR Part 60, Appendix A, Method 9 and the procedures specified in OAC rule 3745-17-03(B)(1).

1.b Emission Limitation:

.020 pound of particulate emissions per mmBtu of actual heat input

Applicable Compliance Method:

Compliance may be demonstrated by multiplying the particulate emission factor of 1.9 lbs/mmcuft by the emissions unit's maximum hourly gas consumption rate of 10,100 cuft/hr, and then dividing by the emissions unit's rated heat input capacity of 10.15 mmBtu/hr.

The particulate emission factor was obtained from AP-42, 5th Edition, Volume I, Chapter 1, Table 1.4-2, dated July, 1998.

If required, the permittee shall demonstrate compliance with this emission limitation through emission tests performed in accordance with 40 CFR Part 60, Appendix A, Methods 1 through 5 and the procedures specified in OAC rule 3745-17-03(B)(9).

Facility Name: **Morgan Adhesives Company (MActac)**

Facility ID: **16-77-11-0026**

Emissions Unit: **N-Line Boiler (B-9) (B015)**

VI. Miscellaneous Requirements

None

Facility Name: **Morgan Adhesives Company (MActac)**

Facility ID: **16-77-11-0026**

Emissions Unit: **N-Line Boiler (B-9) (B015)**

B. State Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

1. The specific operation(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be employed. Additional applicable emissions limitations and/or control measures (if any) may be specified in narrative form following the table.

**Operations, Property,
and/or Equipment**

**Applicable Rules/
Requirements**

**Applicable Emissions
Limitations/Control
Measures**

2. Additional Terms and Conditions

None

II. Operational Restrictions

None

III. Monitoring and/or Record Keeping Requirements

None

IV. Reporting Requirements

None

V. Testing Requirements

None

VI. Miscellaneous Requirements

None

Facility Name: **Morgan Adhesives Company (MACTac)**

Facility ID: **16-77-11-0026**

Emissions Unit: **Coating Line D (K003)**

Part III - Terms and Conditions for Emissions Units

Emissions Unit ID: Coating Line D (K003)

Activity Description: Coating Line D. Pressure sensitive coater capable of coating solvent and water based adhesives, solvent releases, water-based inks, solvent or water-based primers and topcoats. Primarily sheet but also technical products coated. All release coatings are recoverable. Adhesives can be recoverable or non-recoverable types. Primers, topcoats and inks are not

A. State and Federally Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

1. The specific operation(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be employed. Additional applicable emissions limitations and/or control measures (if any) may be specified in narrative form following the table.

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/ Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
coating line D - pressure sensitive coating line	OAC rule 3745-21-09(F)	See A.I.2.a and A.I.2.b below.
	OAC rule 3745-21-09(H)	See A.I.2.a and A.I.2.b below.
	40 CFR Part 63, Subpart KK	exempt See A.II.2 below.

2. Additional Terms and Conditions

- 2.a** The requirements of this rule have been replaced by the requirements specified in the facility specific SIP revision approved by USEPA - Region 5 and promulgated in the Federal Register on xx-xx-xx.
- 2.b** In lieu of the applicable limitations in OAC rules 3745-21-09(F) and 3745-21-09(H), the actual daily emissions of VOC from all of the emissions units K003 through K009, calculated in accordance with section A.III.3, shall comply each day with the facility-wide, daily allowable VOC emission limitation, calculated in accordance with section A.III.2.

The VOC contents of the coating materials shall be determined in accordance with OAC rule 3745-21-10(B) and USEPA Method 24.

Facility Name: **Morgan Adhesives Company (MActac)**

Facility ID: **16-77-11-0026**

Emissions Unit: **Coating Line D (K003)**

II. Operational Restrictions

1. For the carbon adsorption system, the average VOC concentration in the exhaust gases from the carbon adsorber, for any 3-hour block of time, shall not exceed a VOC concentration (ppm) which is 20 percent greater than the average concentration during the most recent emission test that demonstrated the emissions units controlled by the carbon adsorption system were in compliance.
2. The permittee shall not employ more than 400 kg per month, for every month, of organic HAP on printing stations.

III. Monitoring and/or Record Keeping Requirements

1. The permittee shall collect and record the following information each day for each coating employed in coating lines K003 through K009:
 - a. the name and identification number;
 - b. the VOC content, in pounds of VOC per gallon of coating, excluding water and exempt solvents;
 - c. the volume of coating applied, in gallons of coating, excluding water and exempt solvents;
 - d. the density of the VOC content, in pounds of VOC per gallon of VOC; and
 - e. the line in which the coating is applied, and, if applicable, an identification of any VOC control system to which the coating's VOC emissions are being vented;
 - i. if the control system is a carbon adsorber, record whether the VOC in the coating is recoverable or not recoverable via this control technology.

III. Monitoring and/or Record Keeping Requirements (continued)

2. The daily allowable VOC emission limitation for coating lines K003 through K009 shall be calculated in accordance with the following equation and recorded on a daily basis:

$$Ad = (0.67) \text{ SUMMATION}_{i=1}^n \frac{V_i (D - C_i)}{(D - L_i)}$$

where:

Ad = the daily allowable VOC emission limitation for coating lines K003 through K009, in pounds of VOC;

n = subscript denoting the total number of coatings employed for the day;

i = subscript denoting a specific coating;

V = volume of each surface coating applied for the day, in gallons of coating, excluding water and exempt solvents;

C = VOC content of each surface coating applied, in pounds of VOC per gallon of coating, excluding water and exempt solvents;

D = the density of VOC in each coating applied, in pounds of VOC per gallon of VOC (for the purpose of calculating Ad, a standard density of 7.36 will be used for all coatings); and

L = the emission limitation for each surface coating applied (this is 2.9 pounds of VOC per gallon of coating, excluding water and exempt solvents, for a paper coating, and 4.8 pounds of VOC per gallon of coating, excluding water and exempt solvents, for a vinyl coating).

III. Monitoring and/or Record Keeping Requirements (continued)

3. The actual daily VOC emissions (E_d) from coating lines K003 through K009 shall be determined in accordance with the following equation and recorded on a daily basis:

$$E_d = \text{SUMMATION}_{i=1}^n V_i \cdot C_i \cdot (1 - F_i)$$

where:

E_d = the actual daily VOC emissions from coating lines K003 through K009, in pounds of VOC;

n = subscript denoting the total number of coatings employed for the day;

i = subscript denoting a specific coating;

V = volume of each surface coating applied for the day, in gallons of coating, excluding water and exempt solvents;

C = VOC content of each surface coating as applied, in pounds of VOC per gallon of coating, excluding water and exempt solvents; and

F = fraction, by weight, of VOC emissions from the coating reduced or prevented from being emitted to the ambient air (this is the overall efficiency of the capture system and control device).

4. The permittee shall operate and maintain a continuous organic monitoring device and recorder which measures and records the VOC concentrations in the exhaust gases from the carbon adsorption system when the emissions units controlled by the carbon adsorption system are in operation. The organic monitoring device and recorder shall be capable of satisfying the performance requirements specified in 40 CFR Part 60, Appendix B, Performance Specification 8 or Performance Specification 9. Prior to any compliance demonstration, the permittee shall demonstrate that the organic monitoring device and recorder satisfy the requirements of Performance Specification 8 or Performance Specification 9. The organic monitoring device and recorder shall be installed, calibrated, operated and maintained in accordance with the manufacturer's recommendations, with any modifications deemed necessary by the permittee.

The permittee shall collect and record the following information each day any VOC-containing coatings are employed:

- a. a log of the periods of time when the capture (collection) system, control device, and monitoring equipment were not operating and the associated emissions units were in operation; and
- b. all 3-hour blocks of time (when the emissions units were in operation) during which the average VOC concentration in the exhaust gases was more than 20 percent greater than the average concentration during the most recent performance test that demonstrated the emissions units were in compliance.

III. Monitoring and/or Record Keeping Requirements (continued)

5. The permittee also shall collect and record the following information each day for the carbon adsorption system:
 - a. the total uncontrolled VOC emissions from all the coatings being vented to the carbon adsorption system, in pounds per day (T);
 - b. the rolling, 7-day summation of the total uncontrolled VOC emissions from all the coatings being vented to the carbon adsorption system, in pounds (T7);
 - c. the amount of VOC recovered by the carbon adsorption system, in pounds per day (VOCrec);
 - d. the rolling, 7-day summation of the amount of VOC recovered by the carbon adsorption system, in pounds (VOCrec,7); and
 - e. the rolling, 7-day average overall, fractional control efficiency of the carbon adsorption system (SRE7).
6. The overall control efficiency of the carbon adsorption system shall be determined each day by directly comparing the input liquid VOC to the recovered liquid VOC. The procedure for use in this situation is specified in 40 CFR 60.433 with the following modifications: The permittee shall obtain data each day for the solvent usage and solvent recovery and determine the solvent recovery efficiency of the system each day using a rolling, 7-day period. The recovery efficiency for each day is computed as the ratio of the total recovered solvent for that day and the prior 6 consecutive operating days to the total solvent usage for the same 7-day period used for the recovered solvent, rather than a 30-day weighted average as given in 40 CFR 60.433. This ratio shall be expressed as a percentage. This shall be done within 72 hours following each 24-hour period.
7. The permittee shall maintain records of the total volume and organic HAP content of each material applied in the printing stations during each month.

IV. Reporting Requirements

1. In lieu of the applicable reporting requirements in OAC rule 3745-21-09(B)(3), the permittee shall submit quarterly deviation (excursion) reports that identify any daily record that demonstrates a failure to comply with the daily allowable VOC emission limitation calculated each day in accordance with the equation specified in A.III.2.

Each quarterly deviation report also shall include the total annual VOC emissions from emissions unit K009, in tons, through that quarter for which the report is submitted.

If no excursions occur during a calendar quarter, the permittee shall submit a report stating such, along with the total annual VOC emissions from emissions unit K009, in tons, through that quarter for which the report is submitted.

Facility Name: **Morgan Adhesives Company (MActac)**

Facility ID: **16-77-11-0026**

Emissions Unit: **Coating Line D (K003)**

IV. Reporting Requirements (continued)

2. The permittee shall submit quarterly deviation (excursion) reports that identify all 3-hour blocks of time when the emissions units controlled by the carbon adsorption system were in operation during which the average VOC concentration of the exhaust gases from the carbon adsorption system exceeded the concentration limitation specified in section A.II.1.
3. The deviation (excursion) reports shall be submitted in accordance with the requirements specified in Part I - General Term and Condition A.1.c of this permit.
4. The permittee shall notify the Director (the appropriate Ohio EPA District Office or local air agency) in writing of any monthly record showing that more than 400 kg of organic HAP was employed in the printing station. The notification shall include a copy of such record and shall be sent to the Director (the appropriate Ohio EPA District Office or local air agency) within 30 days following the end of the calendar month.

V. Testing Requirements

1. Compliance with the emission limitation in section A.I.1 of these terms and conditions shall be determined in accordance with the following methods:
 - 1.a Emission Limitation:

facility-wide daily allowable VOC emission limitation

Applicable Compliance Method:

Compliance shall be demonstrated based upon the record keeping requirements specified in sections A.III.2 and A.III.3.
2. The permittee shall conduct, or have conducted, emission testing in accordance with the following requirements:
 - a. The emission testing shall be conducted no later than 6 months after permit issuance and within 6 months prior to permit expiration.
 - b. The emission testing shall be conducted to determine the control efficiency of the catalytic incinerators and the carbon adsorption system, the capture efficiency for coating lines vented to the catalytic incinerators and the carbon adsorption system, and the percent overall VOC emissions reduction of the carbon adsorption system.
 - c. The control efficiency (i.e., the percent reduction in mass emissions between the inlet and outlet) shall be determined in accordance with the test methods and procedures specified in OAC rule 3745-21-10(C) or such alternatives approved by USEPA. The test methods and procedures selected shall be based on a consideration of the diversity of the organic species present and their total concentration, and on a consideration of the potential presence of interfering gases.

Facility Name: **Morgan Adhesives Company (MACTac)**

Facility ID: **16-77-11-0026**

Emissions Unit: **Coating Line D (K003)**

V. Testing Requirements (continued)

d. The capture efficiency shall be determined using Methods 204 through 204F, as specified in 40 CFR Part 51, Appendix M, or the permittee may request to use an alternative method or procedure for the determination of capture efficiency in accordance with the USEPA Guidelines for Determining Capture Efficiency, dated January 9, 1995. The Ohio EPA will consider the request, including an evaluation of the applicability, necessity, and validity of the alternative, and may approve the use of the alternative if such approval does not contravene any other applicable requirement.

e. The percent overall VOC emission reduction of the carbon adsorption system shall be determined in accordance with the test methods and procedures specified in 40 CFR Part 60.433 with a rolling, 7-day average, as specified in section A.III.6.

All testing must follow the requirements of OAC rule 3745-21-10(A).

f. The test(s) shall be conducted while the emissions unit is operating at or near its maximum capacity, unless otherwise specified or approved by the appropriate Ohio EPA District Office or local air agency.

Not later than 30 days prior to the proposed test date(s), the permittee shall submit an "Intent to Test" notification to the appropriate Ohio EPA District Office or local air agency. The "Intent to Test" notification shall describe in detail the proposed test methods and procedures, the emissions unit operating parameters, the time(s) and date(s) of the test(s), and the person(s) who will be conducting the test(s). Failure to submit such notification for review and approval prior to the test(s) may result in the Ohio EPA District Office's or local air agency's refusal to accept the results of the emission test(s).

Personnel from the appropriate Ohio EPA District Office or local air agency shall be permitted to witness the test(s), examine the testing equipment, and acquire data and information necessary to ensure that the operation of the emissions unit and the testing procedures provide a valid characterization of the emissions from the emissions unit and/or the performance of the control equipment.

A comprehensive written report on the results of the emissions test(s) shall be signed by the person or persons responsible for the tests and submitted to the appropriate Ohio EPA District Office or local air agency within 30 days following completion of the test(s). The permittee may request additional time for the submittal of the written report, where warranted, with prior approval from the appropriate Ohio EPA District Office or local air agency.

VI. Miscellaneous Requirements

None

B. State Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

1. The specific operation(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be employed. Additional applicable emissions limitations and/or control measures (if any) may be specified in narrative form following the table.

**Operations, Property,
and/or Equipment**

**Applicable Rules/
Requirements**

**Applicable Emissions
Limitations/Control
Measures**

2. Additional Terms and Conditions

None

II. Operational Restrictions

None

III. Monitoring and/or Record Keeping Requirements

None

IV. Reporting Requirements

None

V. Testing Requirements

None

VI. Miscellaneous Requirements

None

Facility Name: **Morgan Adhesives Company (MActac)**

Facility ID: **16-77-11-0026**

Emissions Unit: **Coating Line E (K004)**

Part III - Terms and Conditions for Emissions Units

Emissions Unit ID: Coating Line E (K004)

Activity Description: Coating Line E. Pressure sensitive coater that coats solvent based adhesives and releases. Sheet products. All coatings are recovered. All ovens combined rated at 3,000,000 BTU/hr.

A. State and Federally Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

1. The specific operation(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be employed. Additional applicable emissions limitations and/or control measures (if any) may be specified in narrative form following the table.

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/ Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
coating line E - pressure sensitive coating line	OAC rule 3745-21-09(F)	See A.I.2.a and A.I.2.b below.
	OAC rule 3745-21-09(H)	See A.I.2.a and A.I.2.b below.
	40 CFR Part 63, Subpart KK	exempt See A.II.2 below.

2. Additional Terms and Conditions

- 2.a** The requirements of this rule have been replaced by the requirements specified in the facility specific SIP revision approved by USEPA - Region 5 and promulgated in the Federal Register on xx-xx-xx.
- 2.b** In lieu of the applicable limitations in OAC rules 3745-21-09(F) and 3745-21-09(H), the actual daily emissions of VOC from all of the emissions units K003 through K009, calculated in accordance with section A.III.3, shall comply each day with the facility-wide, daily allowable VOC emission limitation, calculated in accordance with section A.III.2.

The VOC contents of the coating materials shall be determined in accordance with OAC rule 3745-21-10(B) and USEPA Method 24.

Facility Name: **Morgan Adhesives Company (MActac)**

Facility ID: **16-77-11-0026**

Emissions Unit: **Coating Line E (K004)**

II. Operational Restrictions

1. For the carbon adsorption system, the average VOC concentration in the exhaust gases from the carbon adsorber, for any 3-hour block of time, shall not exceed a VOC concentration (ppm) which is 20 percent greater than the average concentration during the most recent emission test that demonstrated the emissions units controlled by the carbon adsorption system were in compliance.
2. The permittee shall not employ more than 400 kg per month, for every month, of organic HAP on printing stations.

III. Monitoring and/or Record Keeping Requirements

1. The permittee shall collect and record the following information each day for each coating employed in coating lines K003 through K009:
 - a. the name and identification number;
 - b. the VOC content, in pounds of VOC per gallon of coating, excluding water and exempt solvents;
 - c. the volume of coating applied, in gallons of coating, excluding water and exempt solvents;
 - d. the density of the VOC content, in pounds of VOC per gallon of VOC; and
 - e. the line in which the coating is applied, and, if applicable, an identification of any VOC control system to which the coating's VOC emissions are being vented;
 - i. if the control system is a carbon adsorber, record whether the VOC in the coating is recoverable or not recoverable via this control technology.

III. Monitoring and/or Record Keeping Requirements (continued)

2. The daily allowable VOC emission limitation for coating lines K003 through K009 shall be calculated in accordance with the following equation and recorded on a daily basis:

$$Ad = (0.67) \text{ SUMMATION}_{i=1}^n \frac{V_i (D - C_i)}{(D - L_i)}$$

where:

Ad = the daily allowable VOC emission limitation for coating lines K003 through K009, in pounds of VOC;

n = subscript denoting the total number of coatings employed for the day;

i = subscript denoting a specific coating;

V = volume of each surface coating applied for the day, in gallons of coating, excluding water and exempt solvents;

C = VOC content of each surface coating applied, in pounds of VOC per gallon of coating, excluding water and exempt solvents;

D = the density of VOC in each coating applied, in pounds of VOC per gallon of VOC (for the purpose of calculating Ad, a standard density of 7.36 will be used for all coatings); and

L = the emission limitation for each surface coating applied (this is 2.9 pounds of VOC per gallon of coating, excluding water and exempt solvents, for a paper coating, and 4.8 pounds of VOC per gallon of coating, excluding water and exempt solvents, for a vinyl coating).

III. Monitoring and/or Record Keeping Requirements (continued)

3. The actual daily VOC emissions (E_d) from coating lines K003 through K009 shall be determined in accordance with the following equation and recorded on a daily basis:

$$E_d = \text{SUMMATION}_{i=1}^n V_i \cdot C_i \cdot (1 - F_i)$$

where:

E_d = the actual daily VOC emissions from coating lines K003 through K009, in pounds of VOC;

n = subscript denoting the total number of coatings employed for the day;

i = subscript denoting a specific coating;

V = volume of each surface coating applied for the day, in gallons of coating, excluding water and exempt solvents;

C = VOC content of each surface coating as applied, in pounds of VOC per gallon of coating, excluding water and exempt solvents; and

F = fraction, by weight, of VOC emissions from the coating reduced or prevented from being emitted to the ambient air (this is the overall efficiency of the capture system and control device).

4. The permittee shall operate and maintain a continuous organic monitoring device and recorder which measures and records the VOC concentrations in the exhaust gases from the carbon adsorption system when the emissions units controlled by the carbon adsorption system are in operation. The organic monitoring device and recorder shall be capable of satisfying the performance requirements specified in 40 CFR Part 60, Appendix B, Performance Specification 8 or Performance Specification 9. Prior to any compliance demonstration, the permittee shall demonstrate that the organic monitoring device and recorder satisfy the requirements of Performance Specification 8 or Performance Specification 9. The organic monitoring device and recorder shall be installed, calibrated, operated and maintained in accordance with the manufacturer's recommendations, with any modifications deemed necessary by the permittee.

The permittee shall collect and record the following information each day any VOC-containing coatings are employed:

- a. a log of the periods of time when the capture (collection) system, control device, and monitoring equipment were not operating and the associated emissions units were in operation; and
- b. all 3-hour blocks of time (when the emissions units were in operation) during which the average VOC concentration in the exhaust gases was more than 20 percent greater than the average concentration during the most recent performance test that demonstrated the emissions units were in compliance.

III. Monitoring and/or Record Keeping Requirements (continued)

5. The permittee also shall collect and record the following information each day for the carbon adsorption system:
 - a. the total uncontrolled VOC emissions from all the coatings being vented to the carbon adsorption system, in pounds per day (T);
 - b. the rolling, 7-day summation of the total uncontrolled VOC emissions from all the coatings being vented to the carbon adsorption system, in pounds (T7);
 - c. the amount of VOC recovered by the carbon adsorption system, in pounds per day (VOCrec);
 - d. the rolling, 7-day summation of the amount of VOC recovered by the carbon adsorption system, in pounds (VOCrec,7); and
 - e. the rolling, 7-day average overall, fractional control efficiency of the carbon adsorption system (SRE7).
6. The overall control efficiency of the carbon adsorption system shall be determined each day by directly comparing the input liquid VOC to the recovered liquid VOC. The procedure for use in this situation is specified in 40 CFR 60.433 with the following modifications: The permittee shall obtain data each day for the solvent usage and solvent recovery and determine the solvent recovery efficiency of the system each day using a rolling, 7-day period. The recovery efficiency for each day is computed as the ratio of the total recovered solvent for that day and the prior 6 consecutive operating days to the total solvent usage for the same 7-day period used for the recovered solvent, rather than a 30-day weighted average as given in 40 CFR 60.433. This ratio shall be expressed as a percentage. This shall be done within 72 hours following each 24-hour period.
7. The permittee shall maintain records of the total volume and organic HAP content of each material applied in the printing stations during each month.

IV. Reporting Requirements

1. In lieu of the applicable reporting requirements in OAC rule 3745-21-09(B)(3), the permittee shall submit quarterly deviation (excursion) reports that identify any daily record that demonstrates a failure to comply with the daily allowable VOC emission limitation calculated each day in accordance with the equation specified in A.III.2.

Each quarterly deviation report also shall include the total annual VOC emissions from emissions unit K009, in tons, through that quarter for which the report is submitted.

If no excursions occur during a calendar quarter, the permittee shall submit a report stating such, along with the total annual VOC emissions from emissions unit K009, in tons, through that quarter for which the report is submitted.

Facility Name: **Morgan Adhesives Company (MActac)**

Facility ID: **16-77-11-0026**

Emissions Unit: **Coating Line E (K004)**

IV. Reporting Requirements (continued)

2. The permittee shall submit quarterly deviation (excursion) reports that identify all 3-hour blocks of time when the emissions units controlled by the carbon adsorption system were in operation during which the average VOC concentration of the exhaust gases from the carbon adsorption system exceeded the concentration limitation specified in section A.II.1.
3. The deviation (excursion) reports shall be submitted in accordance with the requirements specified in Part I - General Term and Condition A.1.c of this permit.
4. The permittee shall notify the Director (the appropriate Ohio EPA District Office or local air agency) in writing of any monthly record showing that more than 400 kg of organic HAP was employed in the printing station. The notification shall include a copy of such record and shall be sent to the Director (the appropriate Ohio EPA District Office or local air agency) within 30 days following the end of the calendar month.

V. Testing Requirements

1. Compliance with the emission limitation in section A.I.1 of these terms and conditions shall be determined in accordance with the following methods:
 - 1.a Emission Limitation:

facility-wide daily allowable VOC emission limitation

Applicable Compliance Method:

Compliance shall be demonstrated based upon the record keeping requirements specified in sections A.III.2 and A.III.3.
2. The permittee shall conduct, or have conducted, emission testing in accordance with the following requirements:
 - a. The emission testing shall be conducted no later than 6 months after permit issuance and within 6 months prior to permit expiration.
 - b. The emission testing shall be conducted to determine the control efficiency of the catalytic incinerators and the carbon adsorption system, the capture efficiency for coating lines vented to the catalytic incinerators and the carbon adsorption system, and the percent overall VOC emissions reduction of the carbon adsorption system.
 - c. The control efficiency (i.e., the percent reduction in mass emissions between the inlet and outlet) shall be determined in accordance with the test methods and procedures specified in OAC rule 3745-21-10(C) or such alternatives approved by USEPA. The test methods and procedures selected shall be based on a consideration of the diversity of the organic species present and their total concentration, and on a consideration of the potential presence of interfering gases.

Facility Name: **Morgan Adhesives Company (MActac)**

Facility ID: **16-77-11-0026**

Emissions Unit: **Coating Line E (K004)**

V. Testing Requirements (continued)

d. The capture efficiency shall be determined using Methods 204 through 204F, as specified in 40 CFR Part 51, Appendix M, or the permittee may request to use an alternative method or procedure for the determination of capture efficiency in accordance with the USEPA Guidelines for Determining Capture Efficiency, dated January 9, 1995. The Ohio EPA will consider the request, including an evaluation of the applicability, necessity, and validity of the alternative, and may approve the use of the alternative if such approval does not contravene any other applicable requirement.

e. The percent overall VOC emission reduction of the carbon adsorption system shall be determined in accordance with the test methods and procedures specified in 40 CFR Part 60.433 with a rolling, 7-day average, as specified in section A.III.6.

All testing must follow the requirements of OAC rule 3745-21-10(A).

f. The test(s) shall be conducted while the emissions unit is operating at or near its maximum capacity, unless otherwise specified or approved by the appropriate Ohio EPA District Office or local air agency.

Not later than 30 days prior to the proposed test date(s), the permittee shall submit an "Intent to Test" notification to the appropriate Ohio EPA District Office or local air agency. The "Intent to Test" notification shall describe in detail the proposed test methods and procedures, the emissions unit operating parameters, the time(s) and date(s) of the test(s), and the person(s) who will be conducting the test(s). Failure to submit such notification for review and approval prior to the test(s) may result in the Ohio EPA District Office's or local air agency's refusal to accept the results of the emission test(s).

Personnel from the appropriate Ohio EPA District Office or local air agency shall be permitted to witness the test(s), examine the testing equipment, and acquire data and information necessary to ensure that the operation of the emissions unit and the testing procedures provide a valid characterization of the emissions from the emissions unit and/or the performance of the control equipment.

A comprehensive written report on the results of the emissions test(s) shall be signed by the person or persons responsible for the tests and submitted to the appropriate Ohio EPA District Office or local air agency within 30 days following completion of the test(s). The permittee may request additional time for the submittal of the written report, where warranted, with prior approval from the appropriate Ohio EPA District Office or local air agency.

VI. Miscellaneous Requirements

None

B. State Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

1. The specific operation(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be employed. Additional applicable emissions limitations and/or control measures (if any) may be specified in narrative form following the table.

**Operations, Property,
and/or Equipment**

**Applicable Rules/
Requirements**

**Applicable Emissions
Limitations/Control
Measures**

2. Additional Terms and Conditions

None

II. Operational Restrictions

None

III. Monitoring and/or Record Keeping Requirements

None

IV. Reporting Requirements

None

V. Testing Requirements

None

VI. Miscellaneous Requirements

None

Facility Name: **Morgan Adhesives Company (MACTac)**

Facility ID: **16-77-11-0026**

Emissions Unit: **Coating Line F (K005)**

Part III - Terms and Conditions for Emissions Units

Emissions Unit ID: Coating Line F (K005)

Activity Description: Coating Line F. Pressure sensitive coater that is capable of coating water and solvent based adhesives, solvent based releases, water or solvent based primers and water based inks. Primarily sheet but occasionally technical products coated. All release coatings are recoverable. Adhesives can be recoverable or non-recoverable. Inks and primers are not recovered. All ovens combined

A. State and Federally Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

1. The specific operation(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be employed. Additional applicable emissions limitations and/or control measures (if any) may be specified in narrative form following the table.

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/ Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
coating line F - pressure sensitive coating line	OAC rule 3745-21-09(F)	See A.I.2.a and A.I.2.b below.
	OAC rule 3745-21-09(H)	See A.I.2.a and A.I.2.b below.
	40 CFR Part 63, Subpart KK	exempt See A.II.2 below.

2. Additional Terms and Conditions

- 2.a** The requirements of this rule have been replaced by the requirements specified in the facility specific SIP revision approved by USEPA - Region 5 and promulgated in the Federal Register on xx-xx-xx.
- 2.b** In lieu of the applicable limitations in OAC rules 3745-21-09(F) and 3745-21-09(H), the actual daily emissions of VOC from all of the emissions units K003 through K009, calculated in accordance with section A.III.3, shall comply each day with the facility-wide, daily allowable VOC emission limitation, calculated in accordance with section A.III.2.

The VOC contents of the coating materials shall be determined in accordance with OAC rule 3745-21-10(B) and USEPA Method 24.

Facility Name: **Morgan Adhesives Company (MActac)**

Facility ID: **16-77-11-0026**

Emissions Unit: **Coating Line F (K005)**

II. Operational Restrictions

1. For the carbon adsorption system, the average VOC concentration in the exhaust gases from the carbon adsorber, for any 3-hour block of time, shall not exceed a VOC concentration (ppm) which is 20 percent greater than the average concentration during the most recent emission test that demonstrated the emissions units controlled by the carbon adsorption system were in compliance.
2. The permittee shall not employ more than 400 kg per month, for every month, of organic HAP on printing stations.

III. Monitoring and/or Record Keeping Requirements

1. The permittee shall collect and record the following information each day for each coating employed in coating lines K003 through K009:
 - a. the name and identification number;
 - b. the VOC content, in pounds of VOC per gallon of coating, excluding water and exempt solvents;
 - c. the volume of coating applied, in gallons of coating, excluding water and exempt solvents;
 - d. the density of the VOC content, in pounds of VOC per gallon of VOC; and
 - e. the line in which the coating is applied, and, if applicable, an identification of any VOC control system to which the coating's VOC emissions are being vented;
 - i. if the control system is a carbon adsorber, record whether the VOC in the coating is recoverable or not recoverable via this control technology.

III. Monitoring and/or Record Keeping Requirements (continued)

2. The daily allowable VOC emission limitation for coating lines K003 through K009 shall be calculated in accordance with the following equation and recorded on a daily basis:

$$Ad = (0.67) \text{ SUMMATION}_{i=1}^n \frac{V_i (D - C_i)}{(D - L_i)}$$

where:

Ad = the daily allowable VOC emission limitation for coating lines K003 through K009, in pounds of VOC;

n = subscript denoting the total number of coatings employed for the day;

i = subscript denoting a specific coating;

V = volume of each surface coating applied for the day, in gallons of coating, excluding water and exempt solvents;

C = VOC content of each surface coating applied, in pounds of VOC per gallon of coating, excluding water and exempt solvents;

D = the density of VOC in each coating applied, in pounds of VOC per gallon of VOC (for the purpose of calculating Ad, a standard density of 7.36 will be used for all coatings); and

L = the emission limitation for each surface coating applied (this is 2.9 pounds of VOC per gallon of coating, excluding water and exempt solvents, for a paper coating, and 4.8 pounds of VOC per gallon of coating, excluding water and exempt solvents, for a vinyl coating).

III. Monitoring and/or Record Keeping Requirements (continued)

3. The actual daily VOC emissions (E_d) from coating lines K003 through K009 shall be determined in accordance with the following equation and recorded on a daily basis:

$$E_d = \text{SUMMATION}_{i=1}^n V_i \cdot C_i \cdot (1 - F_i)$$

where:

E_d = the actual daily VOC emissions from coating lines K003 through K009, in pounds of VOC;

n = subscript denoting the total number of coatings employed for the day;

i = subscript denoting a specific coating;

V = volume of each surface coating applied for the day, in gallons of coating, excluding water and exempt solvents;

C = VOC content of each surface coating as applied, in pounds of VOC per gallon of coating, excluding water and exempt solvents; and

F = fraction, by weight, of VOC emissions from the coating reduced or prevented from being emitted to the ambient air (this is the overall efficiency of the capture system and control device).

4. The permittee shall operate and maintain a continuous organic monitoring device and recorder which measures and records the VOC concentrations in the exhaust gases from the carbon adsorption system when the emissions units controlled by the carbon adsorption system are in operation. The organic monitoring device and recorder shall be capable of satisfying the performance requirements specified in 40 CFR Part 60, Appendix B, Performance Specification 8 or Performance Specification 9. Prior to any compliance demonstration, the permittee shall demonstrate that the organic monitoring device and recorder satisfy the requirements of Performance Specification 8 or Performance Specification 9. The organic monitoring device and recorder shall be installed, calibrated, operated and maintained in accordance with the manufacturer's recommendations, with any modifications deemed necessary by the permittee.

The permittee shall collect and record the following information each day any VOC-containing coatings are employed:

- a. a log of the periods of time when the capture (collection) system, control device, and monitoring equipment were not operating and the associated emissions units were in operation; and
- b. all 3-hour blocks of time (when the emissions units were in operation) during which the average VOC concentration in the exhaust gases was more than 20 percent greater than the average concentration during the most recent performance test that demonstrated the emissions units were in compliance.

III. Monitoring and/or Record Keeping Requirements (continued)

5. The permittee also shall collect and record the following information each day for the carbon adsorption system:
 - a. the total uncontrolled VOC emissions from all the coatings being vented to the carbon adsorption system, in pounds per day (T);
 - b. the rolling, 7-day summation of the total uncontrolled VOC emissions from all the coatings being vented to the carbon adsorption system, in pounds (T7);
 - c. the amount of VOC recovered by the carbon adsorption system, in pounds per day (VOCrec);
 - d. the rolling, 7-day summation of the amount of VOC recovered by the carbon adsorption system, in pounds (VOCrec,7); and
 - e. the rolling, 7-day average overall, fractional control efficiency of the carbon adsorption system (SRE7).
6. The overall control efficiency of the carbon adsorption system shall be determined each day by directly comparing the input liquid VOC to the recovered liquid VOC. The procedure for use in this situation is specified in 40 CFR 60.433 with the following modifications: The permittee shall obtain data each day for the solvent usage and solvent recovery and determine the solvent recovery efficiency of the system each day using a rolling, 7-day period. The recovery efficiency for each day is computed as the ratio of the total recovered solvent for that day and the prior 6 consecutive operating days to the total solvent usage for the same 7-day period used for the recovered solvent, rather than a 30-day weighted average as given in 40 CFR 60.433. This ratio shall be expressed as a percentage. This shall be done within 72 hours following each 24-hour period.
7. The permittee shall maintain records of the total volume and organic HAP content of each material applied in the printing stations during each month.

IV. Reporting Requirements

1. In lieu of the applicable reporting requirements in OAC rule 3745-21-09(B)(3), the permittee shall submit quarterly deviation (excursion) reports that identify any daily record that demonstrates a failure to comply with the daily allowable VOC emission limitation calculated each day in accordance with the equation specified in A.III.2.

Each quarterly deviation report also shall include the total annual VOC emissions from emissions unit K009, in tons, through that quarter for which the report is submitted.

If no excursions occur during a calendar quarter, the permittee shall submit a report stating such, along with the total annual VOC emissions from emissions unit K009, in tons, through that quarter for which the report is submitted.

Facility Name: **Morgan Adhesives Company (MActac)**

Facility ID: **16-77-11-0026**

Emissions Unit: **Coating Line F (K005)**

IV. Reporting Requirements (continued)

2. The permittee shall submit quarterly deviation (excursion) reports that identify all 3-hour blocks of time when the emissions units controlled by the carbon adsorption system were in operation during which the average VOC concentration of the exhaust gases from the carbon adsorption system exceeded the concentration limitation specified in section A.II.1.
3. The deviation (excursion) reports shall be submitted in accordance with the requirements specified in Part I - General Term and Condition A.1.c of this permit.
4. The permittee shall notify the Director (the appropriate Ohio EPA District Office or local air agency) in writing of any monthly record showing that more than 400 kg of organic HAP was employed in the printing station. The notification shall include a copy of such record and shall be sent to the Director (the appropriate Ohio EPA District Office or local air agency) within 30 days following the end of the calendar month.

V. Testing Requirements

1. Compliance with the emission limitation in section A.I.1 of these terms and conditions shall be determined in accordance with the following methods:
 - 1.a Emission Limitation:

facility-wide daily allowable VOC emission limitation

Applicable Compliance Method:

Compliance shall be demonstrated based upon the record keeping requirements specified in sections A.III.2 and A.III.3.
2. The permittee shall conduct, or have conducted, emission testing in accordance with the following requirements:
 - a. The emission testing shall be conducted no later than 6 months after permit issuance and within 6 months prior to permit expiration.
 - b. The emission testing shall be conducted to determine the control efficiency of the catalytic incinerators and the carbon adsorption system, the capture efficiency for coating lines vented to the catalytic incinerators and the carbon adsorption system, and the percent overall VOC emissions reduction of the carbon adsorption system.
 - c. The control efficiency (i.e., the percent reduction in mass emissions between the inlet and outlet) shall be determined in accordance with the test methods and procedures specified in OAC rule 3745-21-10(C) or such alternatives approved by USEPA. The test methods and procedures selected shall be based on a consideration of the diversity of the organic species present and their total concentration, and on a consideration of the potential presence of interfering gases.

V. Testing Requirements (continued)

d. The capture efficiency shall be determined using Methods 204 through 204F, as specified in 40 CFR Part 51, Appendix M, or the permittee may request to use an alternative method or procedure for the determination of capture efficiency in accordance with the USEPA Guidelines for Determining Capture Efficiency, dated January 9, 1995. The Ohio EPA will consider the request, including an evaluation of the applicability, necessity, and validity of the alternative, and may approve the use of the alternative if such approval does not contravene any other applicable requirement.

e. The percent overall VOC emission reduction of the carbon adsorption system shall be determined in accordance with the test methods and procedures specified in 40 CFR Part 60.433 with a rolling, 7-day average, as specified in section A.III.6.

All testing must follow the requirements of OAC rule 3745-21-10(A).

f. The test(s) shall be conducted while the emissions unit is operating at or near its maximum capacity, unless otherwise specified or approved by the appropriate Ohio EPA District Office or local air agency.

Not later than 30 days prior to the proposed test date(s), the permittee shall submit an "Intent to Test" notification to the appropriate Ohio EPA District Office or local air agency. The "Intent to Test" notification shall describe in detail the proposed test methods and procedures, the emissions unit operating parameters, the time(s) and date(s) of the test(s), and the person(s) who will be conducting the test(s). Failure to submit such notification for review and approval prior to the test(s) may result in the Ohio EPA District Office's or local air agency's refusal to accept the results of the emission test(s).

Personnel from the appropriate Ohio EPA District Office or local air agency shall be permitted to witness the test(s), examine the testing equipment, and acquire data and information necessary to ensure that the operation of the emissions unit and the testing procedures provide a valid characterization of the emissions from the emissions unit and/or the performance of the control equipment.

A comprehensive written report on the results of the emissions test(s) shall be signed by the person or persons responsible for the tests and submitted to the appropriate Ohio EPA District Office or local air agency within 30 days following completion of the test(s). The permittee may request additional time for the submittal of the written report, where warranted, with prior approval from the appropriate Ohio EPA District Office or local air agency.

VI. Miscellaneous Requirements

None

B. State Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

1. The specific operation(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be employed. Additional applicable emissions limitations and/or control measures (if any) may be specified in narrative form following the table.

**Operations, Property,
and/or Equipment**

**Applicable Rules/
Requirements**

**Applicable Emissions
Limitations/Control
Measures**

2. Additional Terms and Conditions

None

II. Operational Restrictions

None

III. Monitoring and/or Record Keeping Requirements

None

IV. Reporting Requirements

None

V. Testing Requirements

None

VI. Miscellaneous Requirements

None

Facility Name: **Morgan Adhesives Company (MActac)**

Facility ID: **16-77-11-0026**

Emissions Unit: **Coating Line G (K006)**

Part III - Terms and Conditions for Emissions Units

Emissions Unit ID: Coating Line G (K006)

Activity Description: Coating Line G. Pressure sensitive coater for technical products. Predominately solvent based coatings. All but one release coating are recovered. Adhesive coatings will be controlled via a catalytic oxidizer starting around 02/01/96. All ovens combined rated at 3,000,000 BTU/hr.

A. State and Federally Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

1. The specific operation(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be employed. Additional applicable emissions limitations and/or control measures (if any) may be specified in narrative form following the table.

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/ Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
coating line G - pressure sensitive coating line	OAC rule 3745-21-09(F)	See A.I.2.a and A.I.2.b below.
	OAC rule 3745-21-09(H)	See A.I.2.a and A.I.2.b below.
	40 CFR Part 63, Subpart KK	exempt See A.II.4 below.

2. Additional Terms and Conditions

- 2.a** The requirements of this rule have been replaced by the requirements specified in the facility specific SIP revision approved by USEPA - Region 5 and promulgated in the Federal Register on xx-xx-xx.
- 2.b** In lieu of the applicable limitations in OAC rules 3745-21-09(F) and 3745-21-09(H), the actual daily emissions of VOC from all of the emissions units K003 through K009 at MACtac, calculated in accordance with section A.III.3, shall comply each day with the facility-wide, daily allowable VOC emission limitation, calculated in accordance with section A.III.2.

The VOC contents of the coating materials shall be determined in accordance with OAC rule 3745-21-10(B) and USEPA Method 24.

Facility Name: **Morgan Adhesives Company (MActac)**

Facility ID: **16-77-11-0026**

Emissions Unit: **Coating Line G (K006)**

II. Operational Restrictions

1. For the carbon adsorption system, the average VOC concentration in the exhaust gases from the carbon adsorber, for any 3-hour block of time, shall not exceed a VOC concentration (ppm) which is 20 percent greater than the average concentration during the most recent emission test that demonstrated the emissions units controlled by the carbon adsorption system were in compliance.
2. For each catalytic incinerator, the average temperature of the exhaust gases immediately before the catalyst bed, for any 3-hour block of time when the emissions units controlled by a catalytic incinerator are in operation and employing VOC-containing coatings, shall not be more than 50 degrees Fahrenheit below the average temperature during the most recent emission test that demonstrated the emissions units were in compliance.
3. Each catalytic incinerator shall be operated and maintained in accordance with the manufacturer's recommendations, instructions, and operating manuals. The conversion efficiency of the catalyst in each catalytic incinerator, as determined during the annual catalytic activity test, shall be at least 90% at the test temperature equal to that temperature at which the inlet to the catalyst bed is set.
4. The permittee shall not employ more than 400 kg per month, for every month, of organic HAP on printing stations.

III. Monitoring and/or Record Keeping Requirements

1. The permittee shall collect and record the following information each day for each coating employed in coating lines K003 through K009:
 - a. the name and identification number;
 - b. the VOC content, in pounds of VOC per gallon of coating, excluding water and exempt solvents;
 - c. the volume of coating applied, in gallons of coating, excluding water and exempt solvents;
 - d. the density of the VOC content, in pounds of VOC per gallon of VOC; and
 - e. the line in which the coating is applied, and, if applicable, an identification of any VOC control system to which the coating's VOC emissions are being vented;
 - i. if the control system is a carbon adsorber, record whether the VOC in the coating is recoverable or not recoverable via this control technology.

III. Monitoring and/or Record Keeping Requirements (continued)

2. The daily allowable VOC emission limitation for coating lines K003 through K009 shall be calculated in accordance with the following equation and recorded on a daily basis:

$$Ad = (0.67) \text{ SUMMATION } \frac{V_i (D - C_i)}{(D - L_i)}$$

where:

Ad = the daily allowable VOC emission limitation for coating lines K003 through K009, in pounds of VOC;

n = subscript denoting the total number of coatings employed for the day;

i = subscript denoting a specific coating;

V = volume of each surface coating applied for the day, in gallons of coating, excluding water and exempt solvents;

C = VOC content of each surface coating applied, in pounds of VOC per gallon of coating, excluding water and exempt solvents;

D = the density of VOC in each coating applied, in pounds of VOC per gallon of VOC (for the purpose of calculating Ad, a standard density of 7.36 will be used for all coatings); and

L = the emission limitation for each surface coating applied (this is 2.9 pounds of VOC per gallon of coating, excluding water and exempt solvents, for a paper coating, and 4.8 pounds of VOC per gallon of coating, excluding water and exempt solvents, for a vinyl coating).

III. Monitoring and/or Record Keeping Requirements (continued)

3. The actual daily VOC emissions (E_d) from coating lines K003 through K009 shall be determined in accordance with the following equation and recorded on a daily basis:

$$E_d = \text{SUMMATION}_{i=1}^n V_i * C_i * (1 - F_i)$$

where:

E_d = the actual daily VOC emissions from coating lines K003 through K009, in pounds of VOC;

n = subscript denoting the total number of coatings employed for the day;

i = subscript denoting a specific coating;

V = volume of each surface coating applied for the day, in gallons of coating, excluding water and exempt solvents;

C = VOC content of each surface coating as applied, in pounds of VOC per gallon of coating, excluding water and exempt solvents; and

F = fraction, by weight, of VOC emissions from the coating reduced or prevented from being emitted to the ambient air (this is the overall efficiency of the capture system and control device).

4. The permittee shall operate and maintain a continuous organic monitoring device and recorder which measures and records the VOC concentrations in the exhaust gases from the carbon adsorption system when the emissions units controlled by the carbon adsorption system are in operation. The organic monitoring device and recorder shall be capable of satisfying the performance requirements specified in 40 CFR Part 60, Appendix B, Performance Specification 8 or Performance Specification 9. Prior to any compliance demonstration, the permittee shall demonstrate that the organic monitoring device and recorder satisfy the requirements of Performance Specification 8 or Performance Specification 9. The organic monitoring device and recorder shall be installed, calibrated, operated and maintained in accordance with the manufacturer's recommendations, with any modifications deemed necessary by the permittee.

The permittee shall collect and record the following information each day any VOC-containing coatings are employed:

- a. a log of the periods of time when the capture (collection) system, control device, and monitoring equipment were not operating and the associated emissions units were in operation; and
- b. all 3-hour blocks of time (when the emissions units were in operation) during which the average VOC concentration in the exhaust gases was more than 20 percent greater than the average concentration during the most recent performance test that demonstrated the emissions units were in compliance.

Facility Name: **Morgan Adhesives Company (MActac)**

Facility ID: **16-77-11-0026**

Emissions Unit: **Coating Line G (K006)**

III. Monitoring and/or Record Keeping Requirements (continued)

5. The permittee also shall collect and record the following information each day for the carbon adsorption system:
 - a. the total uncontrolled VOC emissions from all the coatings being vented to the carbon adsorption system, in pounds per day (T);
 - b. the rolling, 7-day summation of the total uncontrolled VOC emissions from all the coatings being vented to the carbon adsorption system, in pounds (T7);
 - c. the amount of VOC recovered by the carbon adsorption system, in pounds per day (VOCrec);
 - d. the rolling, 7-day summation of the amount of VOC recovered by the carbon adsorption system, in pounds (VOCrec,7); and
 - e. the rolling, 7-day average overall, fractional control efficiency of the carbon adsorption system (SRE7).
6. The overall control efficiency of the carbon adsorption system shall be determined each day by directly comparing the input liquid VOC to the recovered liquid VOC. The procedure for use in this situation is specified in 40 CFR 60.433 with the following modifications: The permittee shall obtain data each day for the solvent usage and solvent recovery and determine the solvent recovery efficiency of the system each day using a rolling, 7-day period. The recovery efficiency for each day is computed as the ratio of the total recovered solvent for that day and the prior 6 consecutive operating days to the total solvent usage for the same 7-day period used for the recovered solvent, rather than a 30-day weighted average as given in 40 CFR 60.433. This ratio shall be expressed as a percentage. This shall be done within 72 hours following each 24-hour period.

Facility Name: **Morgan Adhesives Company (MAActac)**

Facility ID: **16-77-11-0026**

Emissions Unit: **Coating Line G (K006)**

III. Monitoring and/or Record Keeping Requirements (continued)

7. The permittee shall operate and maintain continuous temperature monitors and recorder(s) which measure and record(s) the temperature immediately upstream and downstream of each catalytic incinerator's catalyst bed when the emissions units controlled with the catalytic incinerators are in operation. Units shall be in degrees Fahrenheit. The monitoring and recording devices shall be capable of accurately measuring the desired parameter. The temperature monitors and recorder(s) shall be installed, calibrated, operated, and maintained in accordance with the manufacturer's recommendations, with any modifications deemed necessary by the permittee.

The permittee shall collect and record the following information each day any VOC-containing coatings are employed:

- a. all 3-hour blocks of time (when any emissions unit was in operation and employing VOC-containing coatings) during which the average temperature of the exhaust gases immediately before any catalyst bed was more than 50 degrees Fahrenheit below the average temperature during the most recent emission test that demonstrated the emissions units were in compliance;
 - b. a log of the periods of time when any temperature monitoring device was not operating and the associated emissions unit(s) was/were in operation; and
 - c. a log of the periods of time when any catalytic oxidizer alarm system indicates a malfunction of any catalytic oxidizer or an indication from any catalytic oxidizer fail-safe control system that the capacity of any catalytic oxidizer has been exceeded.
8. The permittee shall perform a preventive maintenance inspection of each catalytic incinerator on an annual basis to evaluate the performance of each catalyst bed. The inspection shall consist of internal and visual inspections as detailed in the preventive maintenance checklist submitted to the Ohio EPA on February 12, 1999, and shall include a physical inspection of each unit and checks of associated equipment, including but not limited to burners, controls, dampers, valves, and monitoring and recording equipment. The checks of associated equipment shall be performed in accordance with the manufacturer's recommendations. Repair and replacement of equipment shall be performed as necessitated by the inspection. Samples of catalyst material shall be collected from each catalyst bed to perform the catalyst activity test described in section A.V.6.
- The permittee shall maintain a record of the results of each annual inspection, as well as the results of each catalyst activity test required in section A.V.6.
9. The permittee shall maintain records of the total volume and organic HAP content of each material applied in the printing stations during each month.

Facility Name: **Morgan Adhesives Company (MACTac)**

Facility ID: **16-77-11-0026**

Emissions Unit: **Coating Line G (K006)**

IV. Reporting Requirements

1. In lieu of the applicable reporting requirements in OAC rule 3745-21-09(B)(3), the permittee shall submit quarterly deviation (excursion) reports that identify any daily record that demonstrates a failure to comply with the daily allowable VOC emission limitation calculated each day in accordance with the equation specified in section A.III.2.

Each quarterly deviation report also shall include the total annual VOC emissions from emissions unit K009, in tons, through that quarter for which the report is submitted.

If no excursions occur during a calendar quarter, the permittee shall submit a report stating such, along with the total annual VOC emissions from emissions unit K009, in tons, through that quarter for which the report is submitted.

2. The permittee shall submit quarterly deviation (excursion) reports that identify all 3-hour blocks of time when the emissions units controlled by the carbon adsorption system were in operation during which the average VOC concentration of the exhaust gases from the carbon adsorption system exceeded the concentration limitation specified in section A.II.1.
3. The permittee shall submit quarterly deviation (excursion) reports that identify all 3-hour blocks of time when the emissions units controlled by a catalytic incinerator were in operation during which the average temperature of the exhaust gases immediately before any catalyst bed does not comply with the temperature limitation specified in section A.II.2.
4. The deviation (excursion) reports shall be submitted in accordance with the requirements specified in Part I - General Term and Condition A.1.c of this permit.
5. The permittee shall submit an annual report that includes the results of the annual catalyst activity tests required in section A.V.6. This annual report shall be submitted within 45 days after each catalyst activity test is performed.
6. The permittee shall notify the Director (the appropriate Ohio EPA District Office or local air agency) in writing of any monthly record showing that more than 400 kg of organic HAP was employed in the printing station. The notification shall include a copy of such record and shall be sent to the Director (the appropriate Ohio EPA District Office or local air agency) within 30 days following the end of the calendar month.

V. Testing Requirements

1. Compliance with the emission limitation in section A.I.1 of these terms and conditions shall be determined in accordance with the following methods:

Facility Name: **Morgan Adhesives Company (MActac)**

Facility ID: **16-77-11-0026**

Emissions Unit: **Coating Line G (K006)**

V. Testing Requirements (continued)

1.a Emission Limitation:

facility-wide daily allowable VOC emission limitation

Applicable Compliance Method:

Compliance shall be demonstrated based upon the record keeping requirements specified in sections A.III.2 and A.III.3.

2. The permittee shall conduct, or have conducted, emission testing in accordance with the following requirements:

a. The emission testing shall be conducted no later than 6 months after permit issuance and within 6 months prior to permit expiration.

b. The emission testing shall be conducted to determine the control efficiency of the catalytic incinerators and the carbon adsorption system, the capture efficiency for coating lines vented to the catalytic incinerators and the carbon adsorption system, and the percent overall VOC emissions reduction of the carbon adsorption system.

c. The control efficiency (i.e., the percent reduction in mass emissions between the inlet and outlet) shall be determined in accordance with the test methods and procedures specified in OAC rule 3745-21-10(C) or such alternatives approved by USEPA. The test methods and procedures selected shall be based on a consideration of the diversity of the organic species present and their total concentration, and on a consideration of the potential presence of interfering gases.

d. The capture efficiency shall be determined using Methods 204 through 204F, as specified in 40 CFR Part 51, Appendix M, or the permittee may request to use an alternative method or procedure for the determination of capture efficiency in accordance with the USEPA Guidelines for Determining Capture Efficiency, dated January 9, 1995. The Ohio EPA will consider the request, including an evaluation of the applicability, necessity, and validity of the alternative, and may approve the use of the alternative if such approval does not contravene any other applicable requirement.

e. The percent overall VOC emission reduction of the carbon adsorption system shall be determined in accordance with the test methods and procedures specified in 40 CFR Part 60.433 with a rolling, 7-day average, as specified in section A.III.6.

All testing must follow the requirements of OAC rule 3745-21-10(A).

f. The test(s) shall be conducted while the emissions unit is operating at or near its maximum capacity, unless otherwise specified or approved by the appropriate Ohio EPA District Office or local air agency.

Facility Name: **Morgan Adhesives Company (MACTac)**

Facility ID: **16-77-11-0026**

Emissions Unit: **Coating Line G (K006)**

V. Testing Requirements (continued)

Not later than 30 days prior to the proposed test date(s), the permittee shall submit an "Intent to Test" notification to the appropriate Ohio EPA District Office or local air agency. The "Intent to Test" notification shall describe in detail the proposed test methods and procedures, the emissions unit operating parameters, the time(s) and date(s) of the test(s), and the person(s) who will be conducting the test(s). Failure to submit such notification for review and approval prior to the test(s) may result in the Ohio EPA District Office's or local air agency's refusal to accept the results of the emission test(s).

Personnel from the appropriate Ohio EPA District Office or local air agency shall be permitted to witness the test(s), examine the testing equipment, and acquire data and information necessary to ensure that the operation of the emissions unit and the testing procedures provide a valid characterization of the emissions from the emissions unit and/or the performance of the control equipment.

A comprehensive written report on the results of the emissions test(s) shall be signed by the person or persons responsible for the tests and submitted to the appropriate Ohio EPA District Office or local air agency within 30 days following completion of the test(s). The permittee may request additional time for the submittal of the written report, where warranted, with prior approval from the appropriate Ohio EPA District Office or local air agency.

3. The permittee shall conduct, or have conducted, an annual catalyst activity test using the catalyst sample(s) collected during the annual preventive maintenance inspection described in section A.III.8. An intent to test notification shall not be required for the testing noted in this section. The procedure for the catalyst activity test shall be in accordance with the document titled "Catalyst Activity Procedures" as submitted to the Ohio EPA on February 18, 1999.

VI. Miscellaneous Requirements

None

B. State Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

1. The specific operation(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be employed. Additional applicable emissions limitations and/or control measures (if any) may be specified in narrative form following the table.

**Operations, Property,
and/or Equipment**

**Applicable Rules/
Requirements**

**Applicable Emissions
Limitations/Control
Measures**

2. Additional Terms and Conditions

None

II. Operational Restrictions

None

III. Monitoring and/or Record Keeping Requirements

None

IV. Reporting Requirements

None

V. Testing Requirements

None

VI. Miscellaneous Requirements

None

Facility Name: **Morgan Adhesives Company (MActac)**

Facility ID: **16-77-11-0026**

Emissions Unit: **Coating Line H/I (K007)**

Part III - Terms and Conditions for Emissions Units

Emissions Unit ID: Coating Line H/I (K007)

Activity Description: Coating Line H/I. Pressure sensitive coater capable of coating solvent based adhesives, solvent releases, solvent or water-based primers and topcoats. Primarily sheet and technical products coated. All release coatings are recoverable. Adhesives can be recoverable or non-recoverable types. Coater has two ovens and has capability of coating both sides of web. H-line ovens rated at

A. State and Federally Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

1. The specific operation(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be employed. Additional applicable emissions limitations and/or control measures (if any) may be specified in narrative form following the table.

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/ Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
coating line H/I - pressure sensitive coating line	OAC rule 3745-21-09(F)	See A.I.2.a and A.I.2.b below.
	OAC rule 3745-21-09(H)	See A.I.2.a and A.I.2.b below.

2. Additional Terms and Conditions

- 2.a The requirements of this rule have been replaced by the requirements specified in the facility specific SIP revision approved by USEPA - Region 5 and promulgated in the Federal Register on xx-xx-xx.
- 2.b In lieu of the applicable limitations in OAC rules 3745-21-09(F) and 3745-21-09(H), the actual daily emissions of VOC from all of the emissions units K003 through K009 at MActac, calculated in accordance with section A.III.3, shall comply each day with the facility-wide, daily allowable VOC emission limitation, calculated in accordance with section A.III.2.

The VOC contents of the coating materials shall be determined in accordance with OAC rule 3745-21-10(B) and USEPA Method 24.

Facility Name: **Morgan Adhesives Company (MActac)**

Facility ID: **16-77-11-0026**

Emissions Unit: **Coating Line H/I (K007)**

II. Operational Restrictions

1. For the carbon adsorption system, the average VOC concentration in the exhaust gases from the carbon adsorber, for any 3-hour block of time, shall not exceed a VOC concentration (ppm) which is 20 percent greater than the average concentration during the most recent emission test that demonstrated the emissions units controlled by the carbon adsorption system were in compliance.
2. For each catalytic incinerator, the average temperature of the exhaust gases immediately before the catalyst bed, for any 3-hour block of time when the emissions units controlled by a catalytic incinerator are in operation and employing VOC-containing coatings, shall not be more than 50 degrees Fahrenheit below the average temperature during the most recent emission test that demonstrated the emissions units were in compliance.
3. Each catalytic incinerator shall be operated and maintained in accordance with the manufacturer's recommendations, instructions, and operating manuals. The conversion efficiency of the catalyst in each catalytic incinerator, as determined during the annual catalytic activity test, shall be at least 90% at the test temperature equal to that temperature at which the inlet to the catalyst bed is set.

III. Monitoring and/or Record Keeping Requirements

1. The permittee shall collect and record the following information each day for each coating employed in coating lines K003 through K009:
 - a. the name and identification number;
 - b. the VOC content, in pounds of VOC per gallon of coating, excluding water and exempt solvents;
 - c. the volume of coating applied, in gallons of coating, excluding water and exempt solvents;
 - d. the density of the VOC content, in pounds of VOC per gallon of VOC; and
 - e. the line in which the coating is applied, and, if applicable, an identification of any VOC control system to which the coating's VOC emissions are being vented;
 - i. if the control system is a carbon adsorber, record whether the VOC in the coating is recoverable or not recoverable via this control technology.

Facility Name: **Morgan Adhesives Company (MACTac)**

Facility ID: **16-77-11-0026**

Emissions Unit: **Coating Line H/I (K007)**

III. Monitoring and/or Record Keeping Requirements (continued)

2. The daily allowable VOC emission limitation for coating lines K003 through K009 shall be calculated in accordance with the following equation and recorded on a daily basis:

$$Ad = (0.67) \text{ SUMMATION}_{i=1}^n \frac{V_i (D - C_i)}{(D - L_i)}$$

where:

Ad = the daily allowable VOC emission limitation for coating lines K003 through K009, in pounds of VOC;

n = subscript denoting the total number of coatings employed for the day;

i = subscript denoting a specific coating;

V = volume of each surface coating applied for the day, in gallons of coating, excluding water and exempt solvents;

C = VOC content of each surface coating applied, in pounds of VOC per gallon of coating, excluding water and exempt solvents;

D = the density of VOC in each coating applied, in pounds of VOC per gallon of VOC (for the purpose of calculating Ad, a standard density of 7.36 will be used for all coatings); and

L = the emission limitation for each surface coating applied (this is 2.9 pounds of VOC per gallon of coating, excluding water and exempt solvents, for a paper coating, and 4.8 pounds of VOC per gallon of coating, excluding water and exempt solvents, for a vinyl coating).

III. Monitoring and/or Record Keeping Requirements (continued)

3. The actual daily VOC emissions (E_d) from coating lines K003 through K009 shall be determined in accordance with the following equation and recorded on a daily basis:

$$E_d = \text{SUMMATION}_{i=1}^n V_i \cdot C_i \cdot (1 - F_i)$$

where:

E_d = the actual daily VOC emissions from coating lines K003 through K009, in pounds of VOC;

n = subscript denoting the total number of coatings employed for the day;

i = subscript denoting a specific coating;

V = volume of each surface coating applied for the day, in gallons of coating, excluding water and exempt solvents;

C = VOC content of each surface coating as applied, in pounds of VOC per gallon of coating, excluding water and exempt solvents; and

F = fraction, by weight, of VOC emissions from the coating reduced or prevented from being emitted to the ambient air (this is the overall efficiency of the capture system and control device).

4. The permittee shall operate and maintain a continuous organic monitoring device and recorder which measures and records the VOC concentrations in the exhaust gases from the carbon adsorption system when the emissions units controlled by the carbon adsorption system are in operation. The organic monitoring device and recorder shall be capable of satisfying the performance requirements specified in 40 CFR Part 60, Appendix B, Performance Specification 8 or Performance Specification 9. Prior to any compliance demonstration, the permittee shall demonstrate that the organic monitoring device and recorder satisfy the requirements of Performance Specification 8 or Performance Specification 9. The organic monitoring device and recorder shall be installed, calibrated, operated and maintained in accordance with the manufacturer's recommendations, with any modifications deemed necessary by the permittee.

The permittee shall collect and record the following information each day any VOC-containing coatings are employed:

- a. a log of the periods of time when the capture (collection) system, control device, and monitoring equipment were not operating and the associated emissions units were in operation; and
- b. all 3-hour blocks of time (when the emissions units were in operation) during which the average VOC concentration in the exhaust gases was more than 20 percent greater than the average concentration during the most recent performance test that demonstrated the emissions units were in compliance.

Facility Name: **Morgan Adhesives Company (MActac)**

Facility ID: **16-77-11-0026**

Emissions Unit: **Coating Line H/I (K007)**

III. Monitoring and/or Record Keeping Requirements (continued)

5. The permittee also shall collect and record the following information each day for the carbon adsorption system:
 - a. the total uncontrolled VOC emissions from all the coatings being vented to the carbon adsorption system, in pounds per day (T);
 - b. the rolling, 7-day summation of the total uncontrolled VOC emissions from all the coatings being vented to the carbon adsorption system, in pounds (T7);
 - c. the amount of VOC recovered by the carbon adsorption system, in pounds per day (VOCrec);
 - d. the rolling, 7-day summation of the amount of VOC recovered by the carbon adsorption system, in pounds (VOCrec,7); and
 - e. the rolling, 7-day average overall, fractional control efficiency of the carbon adsorption system (SRE7).
6. The overall control efficiency of the carbon adsorption system shall be determined each day by directly comparing the input liquid VOC to the recovered liquid VOC. The procedure for use in this situation is specified in 40 CFR 60.433 with the following modifications: The permittee shall obtain data each day for the solvent usage and solvent recovery and determine the solvent recovery efficiency of the system each day using a rolling, 7-day period. The recovery efficiency for each day is computed as the ratio of the total recovered solvent for that day and the prior 6 consecutive operating days to the total solvent usage for the same 7-day period used for the recovered solvent, rather than a 30-day weighted average as given in 40 CFR 60.433. This ratio shall be expressed as a percentage. This shall be done within 72 hours following each 24-hour period.

Facility Name: **Morgan Adhesives Company (MAActac)**

Facility ID: **16-77-11-0026**

Emissions Unit: **Coating Line H/I (K007)**

III. Monitoring and/or Record Keeping Requirements (continued)

7. The permittee shall operate and maintain continuous temperature monitors and recorder(s) which measure and record(s) the temperature immediately upstream and downstream of each catalytic incinerator's catalyst bed when the emissions units controlled with the catalytic incinerators are in operation. Units shall be in degrees Fahrenheit. The monitoring and recording devices shall be capable of accurately measuring the desired parameter. The temperature monitors and recorder(s) shall be installed, calibrated, operated, and maintained in accordance with the manufacturer's recommendations, with any modifications deemed necessary by the permittee.

The permittee shall collect and record the following information each day any VOC-containing coatings are employed:

- a. all 3-hour blocks of time (when any emissions unit was in operation and employing VOC-containing coatings) during which the average temperature of the exhaust gases immediately before any catalyst bed was more than 50 degrees Fahrenheit below the average temperature during the most recent emission test that demonstrated the emissions units were in compliance;
 - b. a log of the periods of time when any temperature monitoring device was not operating and the associated emissions unit(s) was/were in operation; and
 - c. a log of the periods of time when any catalytic oxidizer alarm system indicates a malfunction of any catalytic oxidizer or an indication from any catalytic oxidizer fail-safe control system that the capacity of any catalytic oxidizer has been exceeded.
8. The permittee shall perform a preventive maintenance inspection of each catalytic incinerator on an annual basis to evaluate the performance of each catalyst bed. The inspection shall consist of internal and visual inspections as detailed in the preventive maintenance checklist submitted to the Ohio EPA on February 12, 1999, and shall include a physical inspection of each unit and checks of associated equipment, including but not limited to burners, controls, dampers, valves, and monitoring and recording equipment. The checks of associated equipment shall be performed in accordance with the manufacturer's recommendations. Repair and replacement of equipment shall be performed as necessitated by the inspection. Samples of catalyst material shall be collected from each catalyst bed to perform the catalyst activity test described in section A.V.6.

The permittee shall maintain a record of the results of each annual inspection, as well as the results of each catalyst activity test required in section A.V.6.

Facility Name: **Morgan Adhesives Company (MACTac)**

Facility ID: **16-77-11-0026**

Emissions Unit: **Coating Line H/I (K007)**

IV. Reporting Requirements

1. In lieu of the applicable reporting requirements in OAC rule 3745-21-09(B)(3), the permittee shall submit quarterly deviation (excursion) reports that identify any daily record that demonstrates a failure to comply with the daily allowable VOC emission limitation calculated each day in accordance with the equation specified in section A.III.2.

Each quarterly deviation report also shall include the total annual VOC emissions from emissions unit K009, in tons, through that quarter for which the report is submitted.

If no excursions occur during a calendar quarter, the permittee shall submit a report stating such, along with the total annual VOC emissions from emissions unit K009, in tons, through that quarter for which the report is submitted.

2. The permittee shall submit quarterly deviation (excursion) reports that identify all 3-hour blocks of time when the emissions units controlled by the carbon adsorption system were in operation during which the average VOC concentration of the exhaust gases from the carbon adsorption system exceeded the concentration limitation specified in section A.II.1.
3. The permittee shall submit deviation (excursion) reports that identify all 3-hour blocks of time when the emissions units controlled by a catalytic incinerator were in operation during which the average temperature of the exhaust gases immediately before any catalyst bed does not comply with the temperature limitation specified in section A.II.2.
4. The deviation (excursion) reports shall be submitted in accordance with the requirements specified in Part I - General Term and Condition A.1.c of this permit.
5. The permittee shall submit an annual report that includes the results of the annual catalyst activity tests required in section A.V.6. This annual report shall be submitted within 45 days after each catalyst activity test is performed.

V. Testing Requirements

1. Compliance with the emission limitation in section A.I.1 of these terms and conditions shall be determined in accordance with the following methods:

- 1.a Emission Limitation:

facility-wide daily allowable VOC emission limitation

Applicable Compliance Method:

Compliance shall be demonstrated based upon the record keeping requirements specified in sections A.III.2 and A.III.3.

V. Testing Requirements (continued)

2. The permittee shall conduct, or have conducted, emission testing in accordance with the following requirements:
 - a. The emission testing shall be conducted no later than 6 months after permit issuance and within 6 months prior to permit expiration.
 - b. The emission testing shall be conducted to determine the control efficiency of the catalytic incinerators and the carbon adsorption system, the capture efficiency for coating lines vented to the catalytic incinerators and the carbon adsorption system, and the percent overall VOC emissions reduction of the carbon adsorption system.
 - c. The control efficiency (i.e., the percent reduction in mass emissions between the inlet and outlet) shall be determined in accordance with the test methods and procedures specified in OAC rule 3745-21-10(C) or such alternatives approved by USEPA. The test methods and procedures selected shall be based on a consideration of the diversity of the organic species present and their total concentration, and on a consideration of the potential presence of interfering gases.
 - d. The capture efficiency shall be determined using Methods 204 through 204F, as specified in 40 CFR Part 51, Appendix M, or the permittee may request to use an alternative method or procedure for the determination of capture efficiency in accordance with the USEPA Guidelines for Determining Capture Efficiency, dated January 9, 1995. The Ohio EPA will consider the request, including an evaluation of the applicability, necessity, and validity of the alternative, and may approve the use of the alternative if such approval does not contravene any other applicable requirement.
 - e. The percent overall VOC emission reduction of the carbon adsorption system shall be determined in accordance with the test methods and procedures specified in 40 CFR Part 60.433 with a rolling, 7-day average, as specified in section A.III.6.

All testing must follow the requirements of OAC rule 3745-21-10(A).

 - f. The test(s) shall be conducted while the emissions unit is operating at or near its maximum capacity, unless otherwise specified or approved by the appropriate Ohio EPA District Office or local air agency.

Facility Name: **Morgan Adhesives Company (MACTac)**

Facility ID: **16-77-11-0026**

Emissions Unit: **Coating Line H/I (K007)**

V. Testing Requirements (continued)

Not later than 30 days prior to the proposed test date(s), the permittee shall submit an "Intent to Test" notification to the appropriate Ohio EPA District Office or local air agency. The "Intent to Test" notification shall describe in detail the proposed test methods and procedures, the emissions unit operating parameters, the time(s) and date(s) of the test(s), and the person(s) who will be conducting the test(s). Failure to submit such notification for review and approval prior to the test(s) may result in the Ohio EPA District Office's or local air agency's refusal to accept the results of the emission test(s).

Personnel from the appropriate Ohio EPA District Office or local air agency shall be permitted to witness the test(s), examine the testing equipment, and acquire data and information necessary to ensure that the operation of the emissions unit and the testing procedures provide a valid characterization of the emissions from the emissions unit and/or the performance of the control equipment.

A comprehensive written report on the results of the emissions test(s) shall be signed by the person or persons responsible for the tests and submitted to the appropriate Ohio EPA District Office or local air agency within 30 days following completion of the test(s). The permittee may request additional time for the submittal of the written report, where warranted, with prior approval from the appropriate Ohio EPA District Office or local air agency.

3. The permittee shall conduct, or have conducted, an annual catalyst activity test using the catalyst sample(s) collected during the annual preventive maintenance inspection described in section A.III.8. An intent to test notification shall not be required for the testing noted in this section. The procedure for the catalyst activity test shall be in accordance with the document titled "Catalyst Activity Procedures" as submitted to the Ohio EPA on February 18, 1999.

VI. Miscellaneous Requirements

None

B. State Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

1. The specific operation(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be employed. Additional applicable emissions limitations and/or control measures (if any) may be specified in narrative form following the table.

**Operations, Property,
and/or Equipment**

**Applicable Rules/
Requirements**

**Applicable Emissions
Limitations/Control
Measures**

2. Additional Terms and Conditions

None

II. Operational Restrictions

None

III. Monitoring and/or Record Keeping Requirements

None

IV. Reporting Requirements

None

V. Testing Requirements

None

VI. Miscellaneous Requirements

None

Part III - Terms and Conditions for Emissions Units

Emissions Unit ID: Coating Line J (K008)

Activity Description: Coating Line J. Pressure sensitive coater for technical products. Primarily solvent based adhesive coatings, but some water based coatings. Adhesives and releases are coated. All releases are solvent based. Adhesive coatings will be controlled via a catalytic oxidizer starting around 02/01/96. Release coatings will be controlled via the solvent recovery system beginning

A. State and Federally Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

1. The specific operation(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be employed. Additional applicable emissions limitations and/or control measures (if any) may be specified in narrative form following the table.

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/ Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
coating line J - pressure sensitive coating line	OAC rule 3745-21-09(F)	See A.I.2.a and A.I.2.b below.
	OAC rule 3745-21-09(H)	See A.I.2.a and A.I.2.b below.

2. Additional Terms and Conditions

- 2.a The requirements of this rule have been replaced by the requirements specified in the facility specific SIP revision approved by USEPA - Region 5 and promulgated in the Federal Register on xx-xx-xx.
- 2.b In lieu of the applicable limitations in OAC rules 3745-21-09(F) and 3745-21-09(H), the actual daily emissions of VOC from all of the emissions units K003 through K009 at MActac, calculated in accordance with section A.III.3, shall comply each day with the facility-wide, daily allowable VOC emission limitation, calculated in accordance with section A.III.2.

The VOC contents of the coating materials shall be determined in accordance with OAC rule 3745-21-10(B) and USEPA Method 24.

Facility Name: **Morgan Adhesives Company (MActac)**

Facility ID: **16-77-11-0026**

Emissions Unit: **Coating Line J (K008)**

II. Operational Restrictions

1. For the carbon adsorption system, the average VOC concentration in the exhaust gases from the carbon adsorber, for any 3-hour block of time, shall not exceed a VOC concentration (ppm) which is 20 percent greater than the average concentration during the most recent emission test that demonstrated the emissions units controlled by the carbon adsorption system were in compliance.
2. For each catalytic incinerator, the average temperature of the exhaust gases immediately before the catalyst bed, for any 3-hour block of time when the emissions units controlled by a catalytic incinerator are in operation and employing VOC-containing coatings, shall not be more than 50 degrees Fahrenheit below the average temperature during the most recent emission test that demonstrated the emissions units were in compliance.
3. Each catalytic incinerator shall be operated and maintained in accordance with the manufacturer's recommendations, instructions, and operating manuals. The conversion efficiency of the catalyst in each catalytic incinerator, as determined during the annual catalytic activity test, shall be at least 90% at the test temperature equal to that temperature at which the inlet to the catalyst bed is set.

III. Monitoring and/or Record Keeping Requirements

1. The permittee shall collect and record the following information each day for each coating employed in coating lines K003 through K009:
 - a. the name and identification number;
 - b. the VOC content, in pounds of VOC per gallon of coating, excluding water and exempt solvents;
 - c. the volume of coating applied, in gallons of coating, excluding water and exempt solvents;
 - d. the density of the VOC content, in pounds of VOC per gallon of VOC; and
 - e. the line in which the coating is applied, and, if applicable, an identification of any VOC control system to which the coating's VOC emissions are being vented;
 - i. if the control system is a carbon adsorber, record whether the VOC in the coating is recoverable or not recoverable via this control technology.

III. Monitoring and/or Record Keeping Requirements (continued)

2. The daily allowable VOC emission limitation for coating lines K003 through K009 shall be calculated in accordance with the following equation and recorded on a daily basis:

$$Ad = (0.67) \text{ SUMMATION}_{i=1}^n \frac{V_i (D - C_i)}{(D - L_i)}$$

where:

Ad = the daily allowable VOC emission limitation for coating lines K003 through K009, in pounds of VOC;

n = subscript denoting the total number of coatings employed for the day;

i = subscript denoting a specific coating;

V = volume of each surface coating applied for the day, in gallons of coating, excluding water and exempt solvents;

C = VOC content of each surface coating applied, in pounds of VOC per gallon of coating, excluding water and exempt solvents;

D = the density of VOC in each coating applied, in pounds of VOC per gallon of VOC (for the purpose of calculating Ad, a standard density of 7.36 will be used for all coatings); and

L = the emission limitation for each surface coating applied (this is 2.9 pounds of VOC per gallon of coating, excluding water and exempt solvents, for a paper coating, and 4.8 pounds of VOC per gallon of coating, excluding water and exempt solvents, for a vinyl coating).

III. Monitoring and/or Record Keeping Requirements (continued)

3. The actual daily VOC emissions (E_d) from coating lines K003 through K009 shall be determined in accordance with the following equation and recorded on a daily basis:

$$E_d = \text{SUMMATION}_{i=1}^n V_i \cdot C_i \cdot (1 - F_i)$$

where:

E_d = the actual daily VOC emissions from coating lines K003 through K009, in pounds of VOC;

n = subscript denoting the total number of coatings employed for the day;

i = subscript denoting a specific coating;

V = volume of each surface coating applied for the day, in gallons of coating, excluding water and exempt solvents;

C = VOC content of each surface coating as applied, in pounds of VOC per gallon of coating, excluding water and exempt solvents; and

F = fraction, by weight, of VOC emissions from the coating reduced or prevented from being emitted to the ambient air (this is the overall efficiency of the capture system and control device).

4. The permittee shall operate and maintain a continuous organic monitoring device and recorder which measures and records the VOC concentrations in the exhaust gases from the carbon adsorption system when the emissions units controlled by the carbon adsorption system are in operation. The organic monitoring device and recorder shall be capable of satisfying the performance requirements specified in 40 CFR Part 60, Appendix B, Performance Specification 8 or Performance Specification 9. Prior to any compliance demonstration, the permittee shall demonstrate that the organic monitoring device and recorder satisfy the requirements of Performance Specification 8 or Performance Specification 9. The organic monitoring device and recorder shall be installed, calibrated, operated and maintained in accordance with the manufacturer's recommendations, with any modifications deemed necessary by the permittee.

The permittee shall collect and record the following information each day any VOC-containing coatings are employed:

- a. a log of the periods of time when the capture (collection) system, control device, and monitoring equipment were not operating and the associated emissions units were in operation; and
- b. all 3-hour blocks of time (when the emissions units were in operation) during which the average VOC concentration in the exhaust gases was more than 20 percent greater than the average concentration during the most recent performance test that demonstrated the emissions units were in compliance.

Facility Name: **Morgan Adhesives Company (MActac)**

Facility ID: **16-77-11-0026**

Emissions Unit: **Coating Line J (K008)**

III. Monitoring and/or Record Keeping Requirements (continued)

5. The permittee also shall collect and record the following information each day for the carbon adsorption system:
 - a. the total uncontrolled VOC emissions from all the coatings being vented to the carbon adsorption system, in pounds per day (T);
 - b. the rolling, 7-day summation of the total uncontrolled VOC emissions from all the coatings being vented to the carbon adsorption system, in pounds (T7);
 - c. the amount of VOC recovered by the carbon adsorption system, in pounds per day (VOCrec);
 - d. the rolling, 7-day summation of the amount of VOC recovered by the carbon adsorption system, in pounds (VOCrec,7); and
 - e. the rolling, 7-day average overall, fractional control efficiency of the carbon adsorption system (SRE7).
6. The overall control efficiency of the carbon adsorption system shall be determined each day by directly comparing the input liquid VOC to the recovered liquid VOC. The procedure for use in this situation is specified in 40 CFR 60.433 with the following modifications: The permittee shall obtain data each day for the solvent usage and solvent recovery and determine the solvent recovery efficiency of the system each day using a rolling, 7-day period. The recovery efficiency for each day is computed as the ratio of the total recovered solvent for that day and the prior 6 consecutive operating days to the total solvent usage for the same 7-day period used for the recovered solvent, rather than a 30-day weighted average as given in 40 CFR 60.433. This ratio shall be expressed as a percentage. This shall be done within 72 hours following each 24-hour period.

Facility Name: **Morgan Adhesives Company (MAActac)**

Facility ID: **16-77-11-0026**

Emissions Unit: **Coating Line J (K008)**

III. Monitoring and/or Record Keeping Requirements (continued)

7. The permittee shall operate and maintain continuous temperature monitors and recorder(s) which measure and record(s) the temperature immediately upstream and downstream of each catalytic incinerator's catalyst bed when the emissions units controlled with the catalytic incinerators are in operation. Units shall be in degrees Fahrenheit. The monitoring and recording devices shall be capable of accurately measuring the desired parameter. The temperature monitors and recorder(s) shall be installed, calibrated, operated, and maintained in accordance with the manufacturer's recommendations, with any modifications deemed necessary by the permittee.

The permittee shall collect and record the following information each day any VOC-containing coatings are employed:

- a. all 3-hour blocks of time (when any emissions unit was in operation and employing VOC-containing coatings) during which the average temperature of the exhaust gases immediately before any catalyst bed was more than 50 degrees Fahrenheit below the average temperature during the most recent emission test that demonstrated the emissions units were in compliance;
 - b. a log of the periods of time when any temperature monitoring device was not operating and the associated emissions unit(s) was/were in operation; and
 - c. a log of the periods of time when any catalytic oxidizer alarm system indicates a malfunction of any catalytic oxidizer or an indication from any catalytic oxidizer fail-safe control system that the capacity of any catalytic oxidizer has been exceeded.
8. The permittee shall perform a preventive maintenance inspection of each catalytic incinerator on an annual basis to evaluate the performance of each catalyst bed. The inspection shall consist of internal and visual inspections as detailed in the preventive maintenance checklist submitted to the Ohio EPA on February 12, 1999, and shall include a physical inspection of each unit and checks of associated equipment, including but not limited to burners, controls, dampers, valves, and monitoring and recording equipment. The checks of associated equipment shall be performed in accordance with the manufacturer's recommendations. Repair and replacement of equipment shall be performed as necessitated by the inspection. Samples of catalyst material shall be collected from each catalyst bed to perform the catalyst activity test described in section A.V.6.

The permittee shall maintain a record of the results of each annual inspection, as well as the results of each catalyst activity test required in section A.V.6.

Facility Name: **Morgan Adhesives Company (MACTac)**

Facility ID: **16-77-11-0026**

Emissions Unit: **Coating Line J (K008)**

IV. Reporting Requirements

1. In lieu of the applicable reporting requirements in OAC rule 3745-21-09(B)(3), the permittee shall submit quarterly deviation (excursion) reports that identify any daily record that demonstrates a failure to comply with the daily allowable VOC emission limitation calculated each day in accordance with the equation specified in section A.III.2.

Each quarterly deviation report also shall include the total annual VOC emissions from emissions unit K009, in tons, through that quarter for which the report is submitted.

If no excursions occur during a calendar quarter, the permittee shall submit a report stating such, along with the total annual VOC emissions from emissions unit K009, in tons, through that quarter for which the report is submitted.

2. The permittee shall submit quarterly deviation (excursion) reports that identify all 3-hour blocks of time when the emissions units controlled by the carbon adsorption system were in operation during which the average VOC concentration of the exhaust gases from the carbon adsorption system exceeded the concentration limitation specified in section A.II.1.
3. The permittee shall submit deviation (excursion) reports that identify all 3-hour blocks of time when the emissions units controlled by a catalytic incinerator were in operation during which the average temperature of the exhaust gases immediately before any catalyst bed does not comply with the temperature limitation specified in section A.II.2.
4. The deviation (excursion) reports shall be submitted in accordance with the requirements specified in Part I - General Term and Condition A.1.c of this permit.
5. The permittee shall submit an annual report that includes the results of the annual catalyst activity tests required in section A.V.6. This annual report shall be submitted within 45 days after each catalyst activity test is performed.

V. Testing Requirements

1. Compliance with the emission limitation in section A.I.1 of these terms and conditions shall be determined in accordance with the following methods:

- 1.a Emission Limitation:

facility-wide daily allowable VOC emission limitation

Applicable Compliance Method:

Compliance shall be demonstrated based upon the record keeping requirements specified in sections A.III.2 and A.III.3.

Facility Name: **Morgan Adhesives Company (MActac)**

Facility ID: **16-77-11-0026**

Emissions Unit: **Coating Line J (K008)**

V. Testing Requirements (continued)

2. The permittee shall conduct, or have conducted, emission testing in accordance with the following requirements:
 - a. The emission testing shall be conducted no later than 6 months after permit issuance and within 6 months prior to permit expiration.
 - b. The emission testing shall be conducted to determine the control efficiency of the catalytic incinerators and the carbon adsorption system, the capture efficiency for coating lines vented to the catalytic incinerators and the carbon adsorption system, and the percent overall VOC emissions reduction of the carbon adsorption system.
 - c. The control efficiency (i.e., the percent reduction in mass emissions between the inlet and outlet) shall be determined in accordance with the test methods and procedures specified in OAC rule 3745-21-10(C) or such alternatives approved by USEPA. The test methods and procedures selected shall be based on a consideration of the diversity of the organic species present and their total concentration, and on a consideration of the potential presence of interfering gases.
 - d. The capture efficiency shall be determined using Methods 204 through 204F, as specified in 40 CFR Part 51, Appendix M, or the permittee may request to use an alternative method or procedure for the determination of capture efficiency in accordance with the USEPA Guidelines for Determining Capture Efficiency, dated January 9, 1995. The Ohio EPA will consider the request, including an evaluation of the applicability, necessity, and validity of the alternative, and may approve the use of the alternative if such approval does not contravene any other applicable requirement.
 - e. The percent overall VOC emission reduction of the carbon adsorption system shall be determined in accordance with the test methods and procedures specified in 40 CFR Part 60.433 with a rolling, 7-day average, as specified in section A.III.6.

All testing must follow the requirements of OAC rule 3745-21-10(A).

 - f. The test(s) shall be conducted while the emissions unit is operating at or near its maximum capacity, unless otherwise specified or approved by the appropriate Ohio EPA District Office or local air agency.

Facility Name: **Morgan Adhesives Company (MACTac)**

Facility ID: **16-77-11-0026**

Emissions Unit: **Coating Line J (K008)**

V. Testing Requirements (continued)

Not later than 30 days prior to the proposed test date(s), the permittee shall submit an "Intent to Test" notification to the appropriate Ohio EPA District Office or local air agency. The "Intent to Test" notification shall describe in detail the proposed test methods and procedures, the emissions unit operating parameters, the time(s) and date(s) of the test(s), and the person(s) who will be conducting the test(s). Failure to submit such notification for review and approval prior to the test(s) may result in the Ohio EPA District Office's or local air agency's refusal to accept the results of the emission test(s).

Personnel from the appropriate Ohio EPA District Office or local air agency shall be permitted to witness the test(s), examine the testing equipment, and acquire data and information necessary to ensure that the operation of the emissions unit and the testing procedures provide a valid characterization of the emissions from the emissions unit and/or the performance of the control equipment.

A comprehensive written report on the results of the emissions test(s) shall be signed by the person or persons responsible for the tests and submitted to the appropriate Ohio EPA District Office or local air agency within 30 days following completion of the test(s). The permittee may request additional time for the submittal of the written report, where warranted, with prior approval from the appropriate Ohio EPA District Office or local air agency.

3. The permittee shall conduct, or have conducted, an annual catalyst activity test using the catalyst sample(s) collected during the annual preventive maintenance inspection described in section A.III.8. An intent to test notification shall not be required for the testing noted in this section. The procedure for the catalyst activity test shall be in accordance with the document titled "Catalyst Activity Procedures" as submitted to the Ohio EPA on February 18, 1999.

VI. Miscellaneous Requirements

None

B. State Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

1. The specific operation(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be employed. Additional applicable emissions limitations and/or control measures (if any) may be specified in narrative form following the table.

**Operations, Property,
and/or Equipment**

**Applicable Rules/
Requirements**

**Applicable Emissions
Limitations/Control
Measures**

2. Additional Terms and Conditions

None

II. Operational Restrictions

None

III. Monitoring and/or Record Keeping Requirements

None

IV. Reporting Requirements

None

V. Testing Requirements

None

VI. Miscellaneous Requirements

None

Facility Name: **Morgan Adhesives Company (MACTac)**

Facility ID: **16-77-11-0026**

Emissions Unit: **Coating Line K (K009)**

Part III - Terms and Conditions for Emissions Units

Emissions Unit ID: Coating Line K (K009)

Activity Description: Coating Line K. Pressure sensitive coater for technical products. Solvent and water based coatings. Adhesives will be routed to catalytic oxidizer around 02/01/96. Solvent based release coatings are routed to a solvent recovery system. Water based inks are discharged to atmosphere; solvent based inks will be controlled via a catalytic oxidizer beginning 02/01/96. Ovens heated by

A. State and Federally Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

1. The specific operation(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be employed. Additional applicable emissions limitations and/or control measures (if any) may be specified in narrative form following the table.

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/ Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
coating line K - pressure sensitive coating line	OAC rule 3745-21-09(F)	See A.I.2.a and A.I.2.b below.
	OAC rule 3745-21-09(H)	See A.I.2.a and A.I.2.b below.
	40 CFR Part 63, Subpart KK	exempt See A.II.5 below.

2. Additional Terms and Conditions

- 2.a** The requirements of this rule have been replaced by the requirements specified in the facility specific SIP revision approved by USEPA - Region 5 and promulgated in the Federal Register on xx-xx-xx.
- 2.b** In lieu of the applicable limitations in OAC rules 3745-21-09(F) and 3745-21-09(H), the actual daily emissions of VOC from all of the emissions units K003 through K009 at MACTac, calculated in accordance with section A.III.3, shall comply each day with the facility-wide, daily allowable VOC emission limitation, calculated in accordance with section A.III.2.

The VOC contents of the coating materials shall be determined in accordance with OAC rule 3745-21-10(B) and USEPA Method 24.

Facility Name: **Morgan Adhesives Company (MActac)**

Facility ID: **16-77-11-0026**

Emissions Unit: **Coating Line K (K009)**

II. Operational Restrictions

1. For the carbon adsorption system, the average VOC concentration in the exhaust gases from the carbon adsorber, for any 3-hour block of time, shall not exceed a VOC concentration (ppm) which is 20 percent greater than the average concentration during the most recent emission test that demonstrated the emissions units controlled by the carbon adsorption system were in compliance.
2. For each catalytic incinerator, the average temperature of the exhaust gases immediately before the catalyst bed, for any 3-hour block of time when the emissions units controlled by a catalytic incinerator are in operation and employing VOC-containing coatings, shall not be more than 50 degrees Fahrenheit below the average temperature during the most recent emission test that demonstrated the emissions units were in compliance.
3. Each catalytic incinerator shall be operated and maintained in accordance with the manufacturer's recommendations, instructions, and operating manuals. The conversion efficiency of the catalyst in each catalytic incinerator, as determined during the annual catalytic activity test, shall be at least 90% at the test temperature equal to that temperature at which the inlet to the catalyst bed is set.
4. Each permanent total enclosure shall be maintained under negative pressure, at a minimum pressure differential that is not less than -0.007 inch of water, whenever the emissions unit controlled by the permanent total enclosures (K009) is in operation and employing VOC-containing coatings, excluding momentary fluctuations resulting from entering and exiting any permanent total enclosure to perform required maintenance or operational activities.

The doors to each permanent total enclosure shall remain in a closed position during the routine operation of emissions unit K009, except to perform required maintenance or operational activities.

5. The permittee shall not employ more than 400 kg per month, for every month, of organic HAP on printing stations.

III. Monitoring and/or Record Keeping Requirements

1. The permittee shall collect and record the following information each day for each coating employed in coating lines K003 through K009:
 - a. the name and identification number;
 - b. the VOC content, in pounds of VOC per gallon of coating, excluding water and exempt solvents;
 - c. the volume of coating applied, in gallons of coating, excluding water and exempt solvents;
 - d. the density of the VOC content, in pounds of VOC per gallon of VOC; and
 - e. the line in which the coating is applied, and, if applicable, an identification of any VOC control system to which the coating's VOC emissions are being vented;
 - i. if the control system is a carbon adsorber, record whether the VOC in the coating is recoverable or not recoverable via this control technology.

Facility Name: **Morgan Adhesives Company (MACTac)**

Facility ID: **16-77-11-0026**

Emissions Unit: **Coating Line K (K009)**

III. Monitoring and/or Record Keeping Requirements (continued)

2. The daily allowable VOC emission limitation for coating lines K003 through K009 shall be calculated in accordance with the following equation and recorded on a daily basis:

$$Ad = (0.67) \text{ SUMMATION}_{i=1}^n \frac{V_i (D - C_i)}{(D - L_i)}$$

where:

Ad = the daily allowable VOC emission limitation for coating lines K003 through K009, in pounds of VOC;

n = subscript denoting the total number of coatings employed for the day;

i = subscript denoting a specific coating;

V = volume of each surface coating applied for the day, in gallons of coating, excluding water and exempt solvents;

C = VOC content of each surface coating applied, in pounds of VOC per gallon of coating, excluding water and exempt solvents;

D = the density of VOC in each coating applied, in pounds of VOC per gallon of VOC (for the purpose of calculating Ad, a standard density of 7.36 will be used for all coatings); and

L = the emission limitation for each surface coating applied (this is 2.9 pounds of VOC per gallon of coating, excluding water and exempt solvents, for a paper coating, and 4.8 pounds of VOC per gallon of coating, excluding water and exempt solvents, for a vinyl coating).

III. Monitoring and/or Record Keeping Requirements (continued)

3. The actual daily VOC emissions (E_d) from coating lines K003 through K009 shall be determined in accordance with the following equation and recorded on a daily basis:

$$E_d = \text{SUMMATION}_{i=1}^n V_i \cdot C_i \cdot (1 - F_i)$$

where:

E_d = the actual daily VOC emissions from coating lines K003 through K009, in pounds of VOC;

n = subscript denoting the total number of coatings employed for the day;

i = subscript denoting a specific coating;

V = volume of each surface coating applied for the day, in gallons of coating, excluding water and exempt solvents;

C = VOC content of each surface coating as applied, in pounds of VOC per gallon of coating, excluding water and exempt solvents; and

F = fraction, by weight, of VOC emissions from the coating reduced or prevented from being emitted to the ambient air (this is the overall efficiency of the capture system and control device).

4. The permittee shall operate and maintain a continuous organic monitoring device and recorder which measures and records the VOC concentrations in the exhaust gases from the carbon adsorption system when the emissions units controlled by the carbon adsorption system are in operation. The organic monitoring device and recorder shall be capable of satisfying the performance requirements specified in 40 CFR Part 60, Appendix B, Performance Specification 8 or Performance Specification 9. Prior to any compliance demonstration, the permittee shall demonstrate that the organic monitoring device and recorder satisfy the requirements of Performance Specification 8 or Performance Specification 9. The organic monitoring device and recorder shall be installed, calibrated, operated and maintained in accordance with the manufacturer's recommendations, with any modifications deemed necessary by the permittee.

The permittee shall collect and record the following information each day any VOC-containing coatings are employed:

- a. a log of the periods of time when the capture (collection) system, control device, and monitoring equipment were not operating and the associated emissions units were in operation; and
- b. all 3-hour blocks of time (when the emissions units were in operation) during which the average VOC concentration in the exhaust gases was more than 20 percent greater than the average concentration during the most recent performance test that demonstrated the emissions units were in compliance.

Facility Name: **Morgan Adhesives Company (MActac)**

Facility ID: **16-77-11-0026**

Emissions Unit: **Coating Line K (K009)**

III. Monitoring and/or Record Keeping Requirements (continued)

5. The permittee also shall collect and record the following information each day for the carbon adsorption system:
 - a. the total uncontrolled VOC emissions from all the coatings being vented to the carbon adsorption system, in pounds per day (T);
 - b. the rolling, 7-day summation of the total uncontrolled VOC emissions from all the coatings being vented to the carbon adsorption system, in pounds (T7);
 - c. the amount of VOC recovered by the carbon adsorption system, in pounds per day (VOCrec);
 - d. the rolling, 7-day summation of the amount of VOC recovered by the carbon adsorption system, in pounds (VOCrec,7); and
 - e. the rolling, 7-day average overall, fractional control efficiency of the carbon adsorption system (SRE7).
6. The overall control efficiency of the carbon adsorption system shall be determined each day by directly comparing the input liquid VOC to the recovered liquid VOC. The procedure for use in this situation is specified in 40 CFR 60.433 with the following modifications: The permittee shall obtain data each day for the solvent usage and solvent recovery and determine the solvent recovery efficiency of the system each day using a rolling, 7-day period. The recovery efficiency for each day is computed as the ratio of the total recovered solvent for that day and the prior 6 consecutive operating days to the total solvent usage for the same 7-day period used for the recovered solvent, rather than a 30-day weighted average as given in 40 CFR 60.433. This ratio shall be expressed as a percentage. This shall be done within 72 hours following each 24-hour period.

Facility Name: **Morgan Adhesives Company (MActac)**

Facility ID: **16-77-11-0026**

Emissions Unit: **Coating Line K (K009)**

III. Monitoring and/or Record Keeping Requirements (continued)

7. The permittee shall operate and maintain continuous temperature monitors and recorder(s) which measure and record(s) the temperature immediately upstream and downstream of each catalytic incinerator's catalyst bed when the emissions units controlled with the catalytic incinerators are in operation. Units shall be in degrees Fahrenheit. The monitoring and recording devices shall be capable of accurately measuring the desired parameter. The temperature monitors and recorder(s) shall be installed, calibrated, operated, and maintained in accordance with the manufacturer's recommendations, with any modifications deemed necessary by the permittee.

The permittee shall collect and record the following information each day any VOC-containing coatings are employed:

- a. all 3-hour blocks of time (when any emissions unit was in operation and employing VOC-containing coatings) during which the average temperature of the exhaust gases immediately before any catalyst bed was more than 50 degrees Fahrenheit below the average temperature during the most recent emission test that demonstrated the emissions units were in compliance;
 - b. a log of the periods of time when any temperature monitoring device was not operating and the associated emissions unit(s) was/were in operation; and
 - c. a log of the periods of time when any catalytic oxidizer alarm system indicates a malfunction of any catalytic oxidizer or an indication from any catalytic oxidizer fail-safe control system that the capacity of any catalytic oxidizer has been exceeded.
8. The permittee shall perform a preventive maintenance inspection of each catalytic incinerator on an annual basis to evaluate the performance of each catalyst bed. The inspection shall consist of internal and visual inspections as detailed in the preventive maintenance checklist submitted to the Ohio EPA on February 12, 1999, and shall include a physical inspection of each unit and checks of associated equipment, including but not limited to burners, controls, dampers, valves, and monitoring and recording equipment. The checks of associated equipment shall be performed in accordance with the manufacturers recommendations. Repair and replacement of equipment shall be performed as necessitated by the inspection. Samples of catalyst material shall be collected from each catalyst bed to perform the catalyst activity test described in section A.V.6.

The permittee shall maintain a record of the results of each annual inspection, as well as the results of each catalyst activity test required in section A.V.6.

9. The permittee shall maintain and operate monitoring devices and a recorder which continuously and simultaneously measures the pressure inside and outside of each permanent total enclosure on emissions unit K009 any time VOC-containing coatings are employed. The monitoring and recording devices shall be calibrated, operated, and maintained in accordance with the manufacturer's recommendations, instructions, and operating manuals.

The permittee shall record and maintain, on a daily basis, the difference in pressure between the permanent total enclosure and the surrounding area(s) when VOC-containing coatings are employed.

Facility Name: **Morgan Adhesives Company (MACTac)**

Facility ID: **16-77-11-0026**

Emissions Unit: **Coating Line K (K009)**

III. Monitoring and/or Record Keeping Requirements (continued)

10. The permittee shall maintain records of the total volume and organic HAP content of each material applied in the printing stations during each month.

IV. Reporting Requirements

1. In lieu of the applicable reporting requirements in OAC rule 3745-21-09(B)(3), the permittee shall submit quarterly deviation (excursion) reports that identify any daily record that demonstrates a failure to comply with the daily allowable VOC emission limitation calculated each day in accordance with the equation specified in section A.III.2.

Each quarterly deviation report also shall include the total annual VOC emissions from emissions unit K009, in tons, through that quarter for which the report is submitted.

If no excursions occur during a calendar quarter, the permittee shall submit a report stating such, along with the total annual VOC emissions from emissions unit K009, in tons, through that quarter for which the report is submitted.

2. The permittee shall submit quarterly deviation (excursion) reports that identify all 3-hour blocks of time when the emissions units controlled by the carbon adsorption system were in operation during which the average VOC concentration of the exhaust gases from the carbon adsorption system exceeded the concentration limitation specified in section A.II.1.
3. The permittee shall submit quarterly deviation (excursion) reports that identify all 3-hour blocks of time when the emissions units controlled by a catalytic incinerator were in operation during which the average temperature of the exhaust gases immediately before any catalyst bed does not comply with the temperature limitation specified in section A.II.2.
4. The permittee shall submit quarterly pressure differential deviation (excursion) reports that identify all periods of time during which the permanent total enclosure was not maintained at the required differential pressure specified in section A.II.4.
5. The deviation (excursion) reports shall be submitted in accordance with the requirements specified in Part I - General Term and Condition A.1.c of this permit.
6. The permittee shall submit an annual report that includes the results of the annual catalyst activity tests required in section A.V.6. This annual report shall be submitted within 45 days after each catalyst activity test is performed.
7. The permittee shall notify the Director (the appropriate Ohio EPA District Office or local air agency) in writing of any monthly record showing that more than 400 kg of organic HAP was employed in the printing station. The notification shall include a copy of such record and shall be sent to the Director (the appropriate Ohio EPA District Office or local air agency) within 30 days following the end of the calendar month.

Facility Name: **Morgan Adhesives Company (MACTac)**

Facility ID: **16-77-11-0026**

Emissions Unit: **Coating Line K (K009)**

V. Testing Requirements

1. Compliance with the emission limitation in section A.I.1 of these terms and conditions shall be determined in accordance with the following methods:

1.a Emission Limitation:

facility-wide daily allowable VOC emission limitation

Applicable Compliance Method:

Compliance shall be demonstrated based upon the record keeping requirements specified in sections A.III.2 and A.III.3.

2. The permittee shall conduct, or have conducted, emission testing in accordance with the following requirements:

a. The emission testing shall be conducted no later than 6 months after permit issuance and within 6 months prior to permit expiration.

b. The emission testing shall be conducted to determine the control efficiency of the catalytic incinerators and the carbon adsorption system, the capture efficiency for coating lines vented to the catalytic incinerators and the carbon adsorption system, and the percent overall VOC emissions reduction of the carbon adsorption system.

c. The control efficiency (i.e., the percent reduction in mass emissions between the inlet and outlet) shall be determined in accordance with the test methods and procedures specified in OAC rule 3745-21-10(C) or such alternatives approved by USEPA. The test methods and procedures selected shall be based on a consideration of the diversity of the organic species present and their total concentration, and on a consideration of the potential presence of interfering gases.

V. Testing Requirements (continued)

d. The capture efficiency shall be determined using Methods 204 through 204F, as specified in 40 CFR Part 51, Appendix M, or the permittee may request to use an alternative method or procedure for the determination of capture efficiency in accordance with the USEPA Guidelines for Determining Capture Efficiency, dated January 9, 1995. The Ohio EPA will consider the request, including an evaluation of the applicability, necessity, and validity of the alternative, and may approve the use of the alternative if such approval does not contravene any other applicable requirement.

e. The percent overall VOC emission reduction of the carbon adsorption system shall be determined in accordance with the test methods and procedures specified in 40 CFR Part 60.433 with a rolling, 7-day average, as specified in section A.III.6.

All testing must follow the requirements of OAC rule 3745-21-10(A).

f. The test(s) shall be conducted while the emissions unit is operating at or near its maximum capacity, unless otherwise specified or approved by the appropriate Ohio EPA District Office or local air agency.

Not later than 30 days prior to the proposed test date(s), the permittee shall submit an "Intent to Test" notification to the appropriate Ohio EPA District Office or local air agency. The "Intent to Test" notification shall describe in detail the proposed test methods and procedures, the emissions unit operating parameters, the time(s) and date(s) of the test(s), and the person(s) who will be conducting the test(s). Failure to submit such notification for review and approval prior to the test(s) may result in the Ohio EPA District Office's or local air agency's refusal to accept the results of the emission test(s).

Personnel from the appropriate Ohio EPA District Office or local air agency shall be permitted to witness the test(s), examine the testing equipment, and acquire data and information necessary to ensure that the operation of the emissions unit and the testing procedures provide a valid characterization of the emissions from the emissions unit and/or the performance of the control equipment.

A comprehensive written report on the results of the emissions test(s) shall be signed by the person or persons responsible for the tests and submitted to the appropriate Ohio EPA District Office or local air agency within 30 days following completion of the test(s). The permittee may request additional time for the submittal of the written report, where warranted, with prior approval from the appropriate Ohio EPA District Office or local air agency.

3. The permittee shall conduct, or have conducted, an annual catalyst activity test using the catalyst sample(s) collected during the annual preventive maintenance inspection described in section A.III.8. An intent to test notification shall not be required for the testing noted in this section. The procedure for the catalyst activity test shall be in accordance with the document titled "Catalyst Activity Procedures" as submitted to the Ohio EPA on February 18, 1999.

Facility Name: **Morgan Adhesives Company (MActac)**

Facility ID: **16-77-11-0026**

Emissions Unit: **Coating Line K (K009)**

VI. Miscellaneous Requirements

None

B. State Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

1. The specific operation(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be employed. Additional applicable emissions limitations and/or control measures (if any) may be specified in narrative form following the table.

**Operations, Property,
and/or Equipment**

**Applicable Rules/
Requirements**

**Applicable Emissions
Limitations/Control
Measures**

2. Additional Terms and Conditions

None

II. Operational Restrictions

None

III. Monitoring and/or Record Keeping Requirements

None

IV. Reporting Requirements

None

V. Testing Requirements

None

VI. Miscellaneous Requirements

None

Facility Name: **Morgan Adhesives Company (MActac)**

Facility ID: **16-77-11-0026**

Emissions Unit: **Coating Line N (K011)**

Part III - Terms and Conditions for Emissions Units

Emissions Unit ID: Coating Line N (K011)

Activity Description: Coating Line N. Hot melt adhesive and solventless silicone coater. Release ovens rated at 4,000,000 BTU/hr.

A. State and Federally Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

1. The specific operation(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be employed. Additional applicable emissions limitations and/or control measures (if any) may be specified in narrative form following the table.

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/ Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
paper coating line N - hot melt adhesives/solid silicone	OAC rule 3745-21-09(F)	2.9 lbs of volatile organic compounds (VOC) per gallon of coating, excluding water and exempt solvents

2. Additional Terms and Conditions

None

II. Operational Restrictions

None

Facility Name: **Morgan Adhesives Company (MActac)**

Facility ID: **16-77-11-0026**

Emissions Unit: **Coating Line N (K011)**

III. Monitoring and/or Record Keeping Requirements

1. The permittee shall collect and record the following information each month for the line:
 - a. the name and identification number of each coating, as applied; and
 - b. the VOC content of each coating (excluding water and exempt solvents), as applied.

(This information does not have to be kept on a line-by-line basis, unless one or more of the lines is a new emissions unit and subject to specific "gallons/year" and "tons/year" limitations, or just a "tons/year" limitation in a permit to install. In such cases, for each such new emissions unit only, the above-mentioned information must be maintained separately for that line. Also, if the permittee mixes complying coatings at a line, it is not necessary to record the VOC content of the resulting mixture.)

IV. Reporting Requirements

1. The permittee shall submit quarterly deviation (excursion) reports that included an identification of any monthly record showing the use of noncomplying coatings. The notification shall include a copy of such record and shall be sent to the Director (the appropriate Ohio EPA District Office or local air agency) within 30 days following the end of the calendar month.

V. Testing Requirements

1. Compliance with the emission limitation in section A.I.1 of these terms and conditions shall be determined in accordance with the following method:

- 1.a Emission Limitation:

2.9 lbs of VOC per gallon of coating, excluding water and exempt solvents

Applicable Compliance Method:

Compliance shall be demonstrated based upon the records required pursuant to section A.III.1.

U.S. EPA Method 24 shall be used to determine the VOC content for all coatings employed. If, pursuant to section 4.3 of Method 24, 40 CFR Part 60, Appendix A, the permittee determines that Method 24 cannot be used for a particular coating, the permittee shall so notify the Administrator of the U.S. EPA and shall use formulation data for that coating to demonstrate compliance until the U.S. EPA provides alternative analytical procedures or alternative statements for Method 24.

VI. Miscellaneous Requirements

None

B. State Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

1. The specific operation(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be employed. Additional applicable emissions limitations and/or control measures (if any) may be specified in narrative form following the table.

**Operations, Property,
and/or Equipment**

**Applicable Rules/
Requirements**

**Applicable Emissions
Limitations/Control
Measures**

2. Additional Terms and Conditions

None

II. Operational Restrictions

None

III. Monitoring and/or Record Keeping Requirements

None

IV. Reporting Requirements

None

V. Testing Requirements

None

VI. Miscellaneous Requirements

None

Part III - Terms and Conditions for Emissions Units

Emissions Unit ID: Coating Line L (K014)

Activity Description: Coating Line L. Pressure sensitive coater for roll label products. Water based and hot melt adhesives and solventless silicones are applied. Hot melt coating capabilities added 08/91. All ovens combined rated at 13,500,000 BTU/hr.

A. State and Federally Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

1. The specific operation(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be employed. Additional applicable emissions limitations and/or control measures (if any) may be specified in narrative form following the table.

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/ Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
coating line L - emulsion hot melt paper coating line	OAC rule 3745-31-05 (PTI 16-1789)	54.0 lbs/hr of volatile organic compounds (VOC)
	OAC rule 3745-21-09(F)	35.0 tons of VOC/rolling, 12-month period See A.I.2.a below.
	40 CFR Part 60, Subpart RR	0.20 kilogram of VOC per kilogram of coating solids

2. Additional Terms and Conditions

- 2.a The emission limitation based on this applicable rule is less stringent than the emission limitation established pursuant to 40 CFR Part 60, Subpart RR.

Facility Name: **Morgan Adhesives Company (MActac)**

Facility ID: **16-77-11-0026**

Emissions Unit: **Coating Line L (K014)**

II. Operational Restrictions

1. The emissions of VOC from this emissions unit shall not exceed 35.0 tons/yr, based upon a rolling, 12-month summation of the monthly emissions.

To ensure enforceability during the first 12 calendar months of operation following the issuance of this permit, the permittee shall not exceed the emission levels specified in the following table:

Month(s)	Maximum Allowable Cumulative Emissions of VOC (Tons)
1	3.0
1-2	6.0
1-3	12.0
1-4	15.0
1-5	18.0
1-6	21.0
1-7	24.0
1-8	27.0
1-9	30.0
1-10	33.0
1-11	35.0
1-12	35.0

After the first 12 calendar months of operation following the issuance of this permit, compliance with the annual emission limitation for VOC shall be based upon a rolling, 12-month summation of the monthly emissions.

Facility Name: **Morgan Adhesives Company (MActac)**

Facility ID: **16-77-11-0026**

Emissions Unit: **Coating Line L (K014)**

III. Monitoring and/or Record Keeping Requirements

1. The permittee shall collect and record the following information each month for the coating operation:
 - a. the company identification for each coating and cleanup material employed;
 - b. the number of gallons of each coating and cleanup material employed;
 - c. the mass of each coating applied, in kilograms;
 - d. the VOC content of each coating and cleanup material, in pounds per gallon;
 - e. the weight fraction of organics applied of each coating applied;
 - f. the weight fraction of solids applied of each coating applied;
 - g. the VOC emission rate for all coatings and cleanup materials, in pounds;
 - h. the calculated weighted average mass of VOC per mass of coating solids applied, in kilograms of VOC/kilograms of coating solids (see equation in section A.V.1.a);
 - i. the total number of hours the emissions unit was in operation; and
 - j. the average hourly VOC emission rate for all coatings and cleanup materials, i.e., (g)/(i), in pounds per hour (average).

[Note: The coating information must be for the coatings as employed, including any thinning solvents added at the emissions unit.]

IV. Reporting Requirements

1. The permittee shall submit quarterly deviation (excursion) reports that identify the following:
 - a. for the first 12 calendar months of operation following the issuance of this permit, all exceedances of the maximum allowable cumulative VOC emission levels;
 - b. after the first 12 calendar months of operation following the issuance of this permit, all exceedances of the rolling, 12-month VOC emission limitation; and
 - c. an identification of each month during which the average hourly VOC emissions exceeded 54.0 lbs/hr, and the actual average hourly VOC emissions for each such month.

The deviation reports shall be submitted in accordance with the requirements specified in Part I - General Term and Condition A.I.c.ii of this permit.

IV. Reporting Requirements (continued)

2. The permittee shall notify the Director (the appropriate Ohio EPA District Office or local air agency) in writing of any monthly record showing that the weighted average VOC emission rate exceeds the applicable limitation. The notification shall include a copy of such record and shall be sent to the Director (the appropriate Ohio EPA District Office or local air agency) within 45 days after the exceedance occurs.

V. Testing Requirements

1. Compliance with the emission limitations in section A.I.1 of these terms and conditions shall be determined in accordance with the following methods:

- 1.a Emission Limitation:

0.20 kilogram of VOC per kilogram of coating solids applied

Applicable Compliance Method:

The permittee shall calculate a weighted average of the mass of solvent used per mass of coating solids applied for each calendar month based upon the records required pursuant to section A.III.1 and the following equation:

$$G = \frac{\sum_{i=1}^n W_{oi} * M_{ci}}{\sum_{i=1}^n W_{si} * M_{ci}}$$

where:

G = the calculated weighted average mass (kg) of VOC per mass (kg) of coating solids applied each calendar month;

n = subscript denoting the total number of coatings employed;

i = subscript denoting a specific coating;

W_{oi} = the weight fraction of organics applied of each coating applied during a calendar month;

W_{si} = the weight fraction of solids applied of each coating applied during a calendar month; and

M_{ci} = the total mass (kg) of each coating applied during the calendar month as determined from facility records.

Facility Name: **Morgan Adhesives Company (MActac)**

Facility ID: **16-77-11-0026**

Emissions Unit: **Coating Line L (K014)**

V. Testing Requirements (continued)

1.b Emission Limitations:

54.0 lbs/hr of VOC

35.0 tons of VOC/rolling, 12-month period

Applicable Compliance Method:

Compliance shall be demonstrated based upon the records required pursuant to section A.III.1.

If required, the permittee shall demonstrate compliance with the hourly VOC emission limitation through emission tests performed in accordance with 40 CFR Part 60, Appendix A, Methods 1 through 4 and 25.

- 2.** The permittee shall determine the weight fraction of organics and the weight fraction of solids for each coating applied by either 40 CFR Part 60, Appendix A, Method 24 or by the coating manufacturer's formulation data. In the event of any inconsistency between a Method 24 test and manufacturer's formulation data, the Method 24 test will govern. The Director and/or Administrator may require the permittee to perform Method 24 tests when deemed appropriate. For Method 24, the coating sample must be a one liter sample taken into a one liter container at a point where the sample will be representative of the coating applied to the web substrate.

VI. Miscellaneous Requirements

None

B. State Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

1. The specific operation(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be employed. Additional applicable emissions limitations and/or control measures (if any) may be specified in narrative form following the table.

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/ Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
coating line L - emulsion hot melt paper coating line		

2. Additional Terms and Conditions

None

II. Operational Restrictions

None

Facility Name: **Morgan Adhesives Company (MActac)**

Facility ID: **16-77-11-0026**

Emissions Unit: **Coating Line L (K014)**

III. Monitoring and/or Record Keeping Requirements

1. The permit to install for this emissions unit K014 was evaluated based on the actual materials (typically coatings and cleanup materials) and the design parameters of the emissions unit's exhaust system, as specified by the permittee in the permit to install application. The Ohio EPA's "Review of New Sources of Air Toxic Emissions" policy ("Air Toxic Policy") was applied for each pollutant emitted by this emissions unit using data from the permit to install application and the SCREEN 3.0 model (or other Ohio EPA approved model). The predicted 1-hour maximum ground-level concentration from the use of the SCREEN 3.0 model was compared to the Maximum Acceptable Ground-Level Concentration (MAGLC). The following summarizes the results of the modeling for the "worst case" pollutant(s):

Pollutant: vinyl acetate

TLV (mg/m³): 35

Maximum Hourly Emission Rate (lbs/hr): 54

Predicted 1-Hour Maximum Ground-Level Concentration (ug/m³): 440.1

MAGLC (ug/m³): 833.3

Pollutant: ethyl acrylate

TLV (mg/m³): 20

Maximum Hourly Emission Rate (lbs/hr): 54

Predicted 1-Hour Maximum Ground-Level Concentration (ug/m³): 440.1

MAGLC (ug/m³): 476

2. Physical changes to or changes in the method of operation of the emissions unit after its installation or modification could affect the parameters used to determine whether or not the "Air Toxic Policy" is satisfied. Consequently, prior to making a change that could impact such parameters, the permittee shall conduct an evaluation to determine that the "Air Toxic Policy" will still be satisfied. If, upon evaluation, the permittee determines that the "Air Toxic Policy" will not be satisfied, the permittee will not make the change. Changes that can affect the parameters used in applying the "Air Toxic Policy" include the following:
 - a. changes in the composition of the materials used (typically for coatings or cleanup materials), or the use of new materials, that would result in the emission of a compound with a lower Threshold Limit Value (TLV), as indicated in the most recent version of the handbook entitled "American Conference of Governmental Industrial Hygienists (ACGIH)," than the lowest TLV value previously modeled;
 - b. changes in the composition of the materials, or use of new materials, that would result in an increase in emissions of any pollutant with a listed TLV that was proposed in the application and modeled; and
 - c. physical changes to the emissions unit or its exhaust parameters (e.g., increased/ decreased exhaust flow, changes in stack height, changes in stack diameter, etc.).

Facility Name: **Morgan Adhesives Company (MActac)**

Facility ID: **16-77-11-0026**

Emissions Unit: **Coating Line L (K014)**

III. Monitoring and/or Record Keeping Requirements (continued)

3. If the permittee determines that the "Air Toxic Policy" will be satisfied for the above changes, the Ohio EPA will not consider the change(s) to be a "modification" under OAC rule 3745-31-01(VV)(1)(a)(ii), and a modification of the existing permit to install will not be required. If the change(s) is (are) defined as a modification under other provisions of the modification definition (other than (VV)(1)(a)(ii)), then the permittee shall obtain a final permit to install prior to the change.
4. The permittee shall collect, record, and retain the following information when it conducts evaluations to determine that the changed emissions unit will still satisfy the "Air Toxic Policy":
 - a. a description of the parameters changed (composition of materials, new pollutants emitted, change in stack/exhaust parameters, etc.);
 - b. documentation of its evaluation and determination that the changed emissions unit still satisfies the "Air Toxic Policy"; and
 - c. where computer modeling is performed, a copy of the resulting computer model runs that show the results of the application of the "Air Toxic Policy" for the change.

IV. Reporting Requirements

None

V. Testing Requirements

None

VI. Miscellaneous Requirements

None

Facility Name: **Morgan Adhesives Company (MACtac)**
Facility ID: **16-77-11-0026**

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