



State of Ohio Environmental Protection Agency

**RE: FINAL PERMIT TO INSTALL
LAKE COUNTY**

CERTIFIED MAIL

Street Address:

122 S. Front Street

Lazarus Gov. Center TELE: (614) 644-3020 FAX: (614) 644-2329

Mailing Address:

Lazarus Gov. Center
P.O. Box 1049

Application No: 02-19727

Fac ID: 0243081207

DATE: 11/16/2004

Avery Dennison, Cleveland Films Facility
Jeff Lyden
7590 Auburn Rd.
Concord, OH 44077

Enclosed please find an Ohio EPA Permit to Install which will allow you to install the described source(s) in a manner indicated in the permit. Because this permit contains several conditions and restrictions, I urge you to read it carefully.

The Ohio EPA is urging companies to investigate pollution prevention and energy conservation. Not only will this reduce pollution and energy consumption, but it can also save you money. If you would like to learn ways you can save money while protecting the environment, please contact our Office of Pollution Prevention at (614) 644-3469.

You are hereby notified that this action by the Director is final and may be appealed to the Ohio Environmental Review Appeals Commission pursuant to Chapter 3745.04 of the Ohio Revised Code. The appeal must be in writing and set forth the action complained of and the grounds upon which the appeal is based. It must be filed within thirty (30) days after the notice of the Directors action. A copy of the appeal must be served on the Director of the Ohio Environmental Protection Agency within three (3) days of filing with the Commission. An appeal may be filed with the Environmental Review Appeals Commission at the following address:

Environmental Review Appeals Commission
309 South Fourth Street, Room 222
Columbus, Ohio 43215

Sincerely,

Michael W. Ahern, Manager
Permit Issuance and Data Management Section
Division of Air Pollution Control

cc: USEPA

NEDO



**Permit To Install
Terms and Conditions**

**Issue Date: 11/16/2004
Effective Date: 11/16/2004**

FINAL PERMIT TO INSTALL 02-19727

Application Number: 02-19727
Facility ID: 0243081207
Permit Fee: **\$1000**
Name of Facility: Avery Dennison, Cleveland Films Facility
Person to Contact: Jeff Lyden
Address: 7590 Auburn Rd.
Concord, OH 44077

Location of proposed air contaminant source(s) [emissions unit(s)]:
**5750 Heisely Road
Mentor, Ohio**

Description of proposed emissions unit(s):
Paper coating line CF-4.

The above named entity is hereby granted a Permit to Install for the above described emissions unit(s) pursuant to Chapter 3745-31 of the Ohio Administrative Code. Issuance of this permit does not constitute expressed or implied approval or agreement that, if constructed or modified in accordance with the plans included in the application, the above described emissions unit(s) of environmental pollutants will operate in compliance with applicable State and Federal laws and regulations, and does not constitute expressed or implied assurance that if constructed or modified in accordance with those plans and specifications, the above described emissions unit(s) of pollutants will be granted the necessary permits to operate (air) or NPDES permits as applicable.

This permit is granted subject to the conditions attached hereto.

Ohio Environmental Protection Agency

Director

Part I - GENERAL TERMS AND CONDITIONS

A. State and Federally Enforceable Permit To Install General Terms and Conditions

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, 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.
- 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 of federally enforceable 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 made to the appropriate Ohio EPA District Office or local air agency. 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. See B.9 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. 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 shall be submitted pursuant to 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 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. The permittee shall pay all applicable Permit To Install fees within 30 days after the issuance of this Permit To Install.

8. 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.

9. Compliance Requirements

- a. Any document (including reports) required to be submitted and required by a federally applicable requirement in this 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 ORC section 3704.08.
 - 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.

10. Permit To Operate Application

- a. If the permittee is required to apply for a Title V permit pursuant to OAC Chapter 3745-77, the permittee shall submit a complete Title V permit application or a complete Title V permit modification application within twelve (12) months after commencing operation of the emissions units covered by this permit. However, if the proposed new or modified source(s) would be prohibited by the terms and conditions of an existing Title V permit, a Title V permit modification must be obtained before the operation of such new or modified source(s) pursuant to OAC rule 3745-77-04(D) and OAC rule 3745-77-08(C)(3)(d).
- b. If the permittee is required to apply for permit(s) pursuant to OAC Chapter 3745-35, the source(s) identified in this Permit To Install is (are) permitted to operate for a period of up to one year from the date the source(s) commenced operation. Permission to operate is granted only if the facility complies with all requirements contained in this permit and all applicable air pollution laws, regulations, and policies. Pursuant to OAC Chapter 3745-35, the permittee shall submit a complete operating permit application within ninety (90) days after commencing operation of the source(s) covered by this permit.

11. Best Available Technology

As specified in OAC Rule 3745-31-05, all new sources must employ Best Available Technology (BAT). Compliance with the terms and conditions of this permit will fulfill this requirement.

12. 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.

Avery Dennison, Cleveland Films Facility
PTI Application: 02-19727
Issued: 11/16/2004

Facility ID: 0243081207

B. State Only Enforceable Permit To Install General Terms and Conditions

1. Compliance Requirements

The emissions unit(s) identified in this Permit to Install shall remain in full compliance with all applicable State laws and regulations and the terms and conditions of this permit.

2. Reporting Requirements

The permittee shall submit required reports in the following manner:

- a. Reports of any required monitoring and/or recordkeeping of state-only enforceable 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 state-only required 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. 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.

4. Termination of Permit To Install

This permit to install shall terminate within eighteen months of the effective date of the permit to install if the owner or operator has not undertaken a continuing program of installation or modification or has not entered into a binding contractual obligation to undertake and complete

within a reasonable time a continuing program of installation or modification. This deadline may be extended by up to 12 months if application is made to the Director within a reasonable time before the termination date and the party shows good cause for any such extension.

5. Construction of New Sources(s)

The proposed emissions unit(s) shall be constructed in strict accordance with the plans and application submitted for this permit to the Director of the Ohio Environmental Protection Agency. There may be no deviation from the approved plans without the express, written approval of the Agency. Any deviations from the approved plans or the above conditions may lead to such sanctions and penalties as provided under Ohio law. Approval of these plans does not constitute an assurance that the proposed facilities will operate in compliance with all Ohio laws and regulations. Additional facilities shall be installed upon orders of the Ohio Environmental Protection Agency if the proposed sources cannot meet the requirements of this permit or cannot meet applicable standards.

If the construction of the proposed emissions unit(s) has already begun or has been completed prior to the date the Director of the Environmental Protection Agency approves the permit application and plans, the approval does not constitute expressed or implied assurance that the proposed facility has been constructed in accordance with the approved plans. The action of beginning and/or completing construction prior to obtaining the Director's approval constitutes a violation of OAC rule 3745-31-02. Furthermore, issuance of the Permit to Install does not constitute an assurance that the proposed source will operate in compliance with all Ohio laws and regulations. Approval of the plans in any case is not to be construed as an approval of the facility as constructed and/or completed. Moreover, issuance of the Permit to Install is not to be construed as a waiver of any rights that the Ohio Environmental Protection Agency (or other persons) may have against the applicant for starting construction prior to the effective date of the permit. Additional facilities shall be installed upon orders of the Ohio Environmental Protection Agency if the proposed facilities cannot meet the requirements of this permit or cannot meet applicable standards.

6. Public Disclosure

The facility is hereby notified that this permit, and all agency records concerning the operation of this permitted source, are subject to public disclosure in accordance with OAC rule 3745-49-03.

7. Applicability

This Permit to Install is applicable only to the emissions unit(s) identified in the Permit To Install. Separate application must be made to the Director for the installation or modification of any other emissions unit(s).

8. Construction Compliance Certification

Avery Dennison, Cleveland Films Facility
PTI Application: 02-19727
Issued: 11/16/2004

Facility ID: 0243081207

If applicable, the applicant shall provide Ohio EPA with a written certification (see enclosed form if applicable) that the facility has been constructed in accordance with the Permit To Install application and the terms and conditions of the Permit to Install. The certification shall be provided to Ohio EPA upon completion of construction but prior to startup of the source.

9. 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.

C. Permit To Install Summary of Allowable Emissions

The following information summarizes the total allowable emissions, by pollutant, based on the individual allowable emissions of each air contaminant source identified in this permit.

SUMMARY (for informational purposes only)
TOTAL PERMIT TO INSTALL ALLOWABLE EMISSIONS

| <u>Pollutant</u> | <u>Tons Per Year</u> |
|------------------|----------------------|
| VOC | 39.8 |
| NOx | 18.95 |
| CO | 13.26 |

Avery Dennison, Cleveland Films Facility

Facility ID: 0243081207

PTI Application: 02-19727

Issued: 11/16/2004

Part II - FACILITY SPECIFIC TERMS AND CONDITIONS

A. State and Federally Enforceable Permit To Install Facility Specific Terms and Conditions

None

B. State Only Enforceable Permit To Install Facility Specific Terms and Conditions

None

P**ART III - SPECIAL TERMS AND CONDITIONS FOR SPECIFIC EMISSIONS UNIT(S)****A. Applicable Emissions Limitations and/or Control Requirements**

1. The specific operations(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 specified in narrative form following the table.

| <u>Operations, Property, and/or Equipment</u> | <u>Applicable Rules/Requirements</u> | |
|---|--------------------------------------|------------------------------|
| K004 - Coating Line CF-4 emulsion paper and film coater with web unwind station, application coating stations, web treatment units, drying ovens, web rewind station, and up to twelve adhesive storage tanks for CF-4 coating usage only | OAC rule 3745-31-05(A)(3) | 40 CFR Part 60, Subpart RR |
| | OAC rule 3745-31-05(C) | |
| | OAC rule 3745-21-09(F) | 40 CFR Part 63, Subpart JJJJ |

Avery**PTI A****Issued: 11/16/2004**Emissions Unit ID: **K004**

Applicable Emissions
Limitations/Control Measures

770 pounds Volatile organic compounds (VOC) per hour from the coating line, including cleanup, as a daily average; (See A.2.a.)

4.32 pounds per hour and 18.95 tons per year of Nitrogen Oxides (NOx) emissions from the ovens and web treater(See Section B.1.); and

3.64 pounds per hour and 13.26 tons per year of Carbon monoxide (CO) emissions from the ovens and web treatment

39.87 tons VOC per rolling 12-month period, including cleanup; See Section A.2.a.

The VOC content limitation specified by this rule is less stringent than the VOC content limitation established pursuant to OAC rule 3745-31-05(A)(3). (See Section 2.a.)

The permittee shall not discharge VOC emissions into the atmosphere of more than 0.20 kg VOC/kg of coating solids applied, calculated as a mass-weighted average for each month.

The permittee shall not discharge

organic HAP emissions into the atmosphere of more than 1.6 percent of the mass of coating applied or more than 8 percent of the mass of coating solids applied calculated for each month.

2. Additional Terms and Conditions

- 2.a** Only coatings with a maximum VOC content of 0.50 pound per gallon of coating, actual as applied, shall be used in this emissions unit.

- 2.b** Emissions, including cleanup, from the CF-4 coating line, emissions unit ID number K004, shall not exceed 39.87 tons VOC per rolling 12-month period, and for the first 12 months following the effective date of this permit. This annual VOC emission limitation keeps emissions from this CF-4 coating line below the significant net VOC emissions increase threshold to avoid triggering prevention of significant (PSD) or nonattainment new source review permit requirements.

To ensure enforceability during the first twelve (12) calendar months of operation following the effective date of this permit to install, VOC emissions from this emissions unit shall not exceed the emissions levels specified in the following table:

| Month | CumulativeVOC emissions, including cleanup, in tons |
|-------|---|
| 1 | 10.0 |
| 2 | 12.72 |
| 3 | 15.44 |
| 4 | 18.16 |
| 5 | 20.8 |
| 6 | 23.60 |
| 7 | 26.32 |
| 8 | 29.04 |
| 9 | 31.76 |
| 10 | 34.48 |
| 11 | 37.20 |
| 12 | 39.87 |

After the first twelve calendar months of operation following the effective date of this permit, compliance shall be based upon a rolling 12-month summation of the VOC emissions.

- 2.c** The permittee shall comply with all applicable requirements in the MACT for Paper and other Web Coating, 40 CFR, Part 63, Subpart JJJJ.

And, if the MACT is substantially revised then the permittee is expected to comply with the newly revised MACT and must submit a minor modification to the Title V permit.

B. Operational Restrictions

1. The permittee shall use low NOx burners in the drying ovens at all times when this emissions unit is in operation.
2. The weight of volatile organic compounds applied/used in this emissions unit shall not exceed 39.8 tons of per rolling 12 months, calculated using the following formula:

$$39.8 \text{ tons VOC} \geq \sum_{n=1}^i \frac{(P_i)(VOC_i)}{2000 \text{ lbs/ton}}$$

where:

P_i = usage of coating and cleanup material i in gallons for the last 12 months

VOC_i = volatile organic compound content of coating i, cleanup material i, in pounds VOC per gallon.

To ensure enforceability during the first twelve (12) calendar months of operation following the effective date of this permit to install, volatile organic compounds applied/used in this emissions unit shall not exceed the emissions levels specified in the following table:

| Month | Cumulative VOC applied, including cleanup, in tons |
|-------|--|
| 1 | 10.0 |
| 2 | 12.72 |
| 3 | 15.44 |
| 4 | 18.16 |
| 5 | 20.8 |
| 6 | 23.60 |
| 7 | 26.32 |
| 8 | 29.04 |

| | |
|----|-------|
| 9 | 31.76 |
| 10 | 34.48 |
| 11 | 37.20 |
| 12 | 39.87 |

After the first twelve calendar months of operation following the effective date of this permit, compliance shall be based upon a rolling 12-month summation of the VOC emissions.

C. Monitoring and/or Recordkeeping Requirements

1. The permittee shall collect and record the following information each month for this emissions unit:
 - a. the name and identification number of each coating and cleanup material employed;
 - b. the VOC content of each coating and cleanup material employed;
 - c. the number of gallons of each coating and cleanup material employed each day;
 - d. the total VOC emissions from all coatings and cleanup materials, in pounds and tons, for each day;
 - e. the total VOC emissions from all coatings and cleanup materials, in pounds and tons;
 - f. the total VOC emissions from all coatings and cleanup materials, for the first year to date, in tons per month;
 - g. the rolling 12-month VOC emissions from all coatings and cleanup materials, in tons;
 - h. the rolling 12-month volatile organic compounds applied/used from all coatings and cleanup materials, in tons
 - i. the total number of hours the emissions unit was in operation in hours per day;
 - j. the daily average hourly VOC emission rate from all coatings and cleanup materials employed, [(d)/(i)], in pounds per hour (daily average);
2. The permittee shall collect and record the following information each month for this emissions unit:

- a. The name and identification number of each coating employed;
- b. The weighted average of the mass of solvent (VOC) used per mass of coating solids applied, in kg VOC/kg coating solids applied, calculated in accordance with the equation in section 60.443(a)(2) of 40 CFR 60, Subpart RR, and as follows:
 - i. The weight fraction of volatile organic compounds and the weight fraction coating solids of each coating applied shall be determined by 40 CFR Part 60, Appendix A, Reference Method 24, or other test method approved by U.S. EPA, or by the coating manufacturer's formulation data, if approved by U.S. EPA. In accordance with the USEPA's written approval of February 11, 1998, GCMS, Capillary Column Technique Method 8260A may be used to determine the VOC content of the water-based coatings, pursuant to section 4.3 of Method 24, 40 CFR Part 60, Appendix A.
 - ii. The weighted average shall be calculated using the following equation:

$$G = (TWM_o) / (TWM_s)$$

Where

TWM_o = the sum, from $i = 1$ to $i = n$, of $(W_{oi} \times M_{ci})_i$

TWM_s = the sum, from $i = 1$ to $i = n$, of $(W_{si} \times M_{ci})_i$

i = subscript denoting an individual coating

n = the number of different coatings employed

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

W_{oi} = the weight fraction of volatile organic compounds of each coating (i) applied during the calendar month as determined by Reference Method 24 or other test method approved by U.S. EPA, or by the coating manufacturer's formulation data.

W_{si} = the weight fraction of coating solids of each coating (i) applied during the calendar month as determined by Reference Method 24 or other test method approved by U.S. EPA, or by the coating manufacturer's formulation data.

3. The permittee shall collect and record the following information each month for this emissions unit:
- a. The name and identification number of each coating employed;
 - b. The average of the mass of HAP emissions per mass of coating solids applied, in kg HAP/kg coating solids applied, calculated in accordance with the equations in section 63.3370(c)(4) of 40 CFR 63, Subpart JJJJ, and as follows:
 - i. If required, the weight fraction of HAP and the weight fraction coating solids of each coating applied shall be determined by 40 CFR Part 63, Appendix A, Reference Method 311, 40 CFR Part 60, Appendix A, Reference Method 24, or other test method approved by U.S. EPA, or by the coating manufacturer's formulation data, if approved by U.S. EPA.
 - ii. The average shall be calculated using the following equation:

Where:

Hs = Monthly average, as-applied, organic HAP to coating solids ratio, kg organic HAP/kg coating solids applied.

p = Number of different coating materials applied in a month.

Chi = Organic HAP content of coating material, i, as-purchased, expressed as a mass fraction, kg/kg.

Mi = Mass of as-purchased coating material, i, applied in a month, kg.

q = Number of different materials added to the coating material.

Chij = Organic HAP content of material, j, added to as-purchased coating material, i, expressed as a mass fraction, kg/kg.

Mij = Mass of material, j, added to as-purchased coating material, i, in a month, kg.

Mvret = Mass of volatile matter retained in the coated web after curing or drying, or otherwise not emitted to the atmosphere, kg. The value of this term will be zero in all cases except where you choose to take into account the volatile matter retained in the coated web or otherwise not emitted to the atmosphere for the compliance demonstration procedures in §§ 63.3370.

Csi = Coating solids content of coating material, i, expressed as a mass fraction, kg/kg.

Csij = Coating solids content of material, j, added to as-purchased coating material, i, expressed as a mass-fraction, kg/kg.

- c. The average of the mass of HAP emissions per mass of coating applied, in kg HAP/kg coating solids applied, calculated in accordance with the equations in section 63.3370(c)(1) of 40 CFR 63, Subpart JJJJ, and as follows:
 - i. If required, the weight fraction of HAP and the weight fraction coating of each coating applied shall be determined by 40 CFR Part 63, Appendix A, Reference Method 311, 40 CFR Part 60, Appendix A, Reference Method 24, or other test method approved by U.S. EPA, or by the coating manufacturer's formulation data, if approved by U.S. EPA.
 - ii. The average shall be calculated by the following formula:

Where:

HL = Monthly average, as-applied, organic HAP content of all coating materials applied, expressed as kg organic HAP per kg of coating material applied, kg/kg.

p = Number of different coating materials applied in a month.

Chi = Organic HAP content of coating material, i, as-purchased, expressed as a mass fraction, kg/kg.

Mi = Mass of as-purchased coating material, i, applied in a month, kg.

q = Number of different materials added to the coating material.

Chij = Organic HAP content of material, j, added to as-purchased coating material, i, expressed as a mass fraction, kg/kg.

Mij = Mass of material, j, as-purchased coating month, kg.

Mvret = Mass of volatile retained in the coated web drying, or otherwise not

emitted to the atmosphere, kg. The value of this term will be zero in all cases except where you choose to take into account the volatile matter retained in the coated web or otherwise not emitted to the atmosphere for the compliance demonstration procedures in §§ 63.3370.

added to material, i, in a matter after curing or

$$H_L = \frac{\sum_{i=1}^p C_{hi} M_i + \sum_{j=1}^q C_{hij} M_{ij} - M_{vret}}{\sum_{i=1}^p M_i + \sum_{j=1}^q M_{ij}} \quad \text{Eq. 4}$$

D. Reporting Requirements

1. The permittee shall submit deviation (excursion) reports which include the following information for this emissions unit:
 - a. an identification of each day during which the VOC content of any coating, employed in this emissions unit, exceeded the VOC content limit of 0.50 pound per gallon of coating, as applied, and the actual VOC content in pounds of VOC per gallon of coating, for each such coating;
 - b. an identification of each day during which the average hourly VOC emissions exceeded 770.0 pounds per hour, and the average hourly VOC emissions for each such day;
 - c. an identification of any record indicating that the rolling 12-month summation of VOC emissions, or the annual VOC emissions exceeded 39.87 tons per year, and the actual rolling 12-month summation and/or the actual annual VOC emissions;
 - d. an identification of each month during which the mass-weighted average VOC emissions from coatings exceeded 0.20 kg VOC/kg of coating solids applied, and the actual mass-weighted average VOC emissions from coatings in kg VOC per kg of coating solids applied, for each such month;
 - e. an identification of each month during which the average HAP emissions from coatings exceeded 8 percent of the mass of coating solids applied as described in the equation in Section C.3(b)(ii) of the terms and conditions of this permit, and 1.6 percent of the mass of coatings, applied as described in the equation in Section C.3.(c)(ii) of the terms and conditions of this permit, and actual percentage of the HAP emissions of the mass of coatings and the actual percentage of the HAP emissions of the mass of coating solids for each such month.
2. Within 60 days after startup of this emissions unit, the permittee shall submit to the Ohio EPA a Notification of Compliance Status, signed by the responsible official who shall certify its accuracy, attesting to whether the emissions unit has complied with the relevant standard. The notification shall list:
 - a. The methods that were used to determine compliance;
 - b. The results of any performance tests, opacity or visible emission observations, continuous monitoring system (CMS) performance evaluations, and/or other monitoring procedure or methods that were conducted;

- c. The methods that will be used for determining continuing compliance, including a description of monitoring and reporting requirements and test methods;
 - d. The type and quantity of Hazardous Air Pollutant(s) [HAP(s)] emitted by the emissions unit, reported in units and averaging times and in accordance with the test methods specified in 40 CFR 63 Subpart JJJJ;
 - e. An analysis demonstrating whether the affected source is a major source or an area source;
 - f. A description of the air pollution control equipment (or method) for each emission point, including each control device (or method) for each HAP and the control efficiency (percent) for each control device (or method); and
 - g. A statement by the owner or operator of this affected source of whether the emissions unit has complied with the requirements of 40 CFR Part 63, Subpart JJJJ.
3. The permittee shall submit semi-annual compliance reports as required by 40 CFR Part 63, Subpart JJJJ in accordance with the requirements of 63.3400(c)(1) and (2).

E. Testing Requirements

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

0.50 pounds of VOC per gallon of coating, as applied

Applicable Compliance Method

Compliance shall be determined based upon the record keeping requirements specified in section C.1 of these terms and conditions. In accordance with OAC rule 3745-21-04 (B)(5), USEPA Method 24 shall be used to determine the VOC content of the coatings. In accordance with the USEPA's written approval of February 11, 1998, GCMS, Capillary Column Technique Method 8260A may be used to determine the VOC content of the water-based coatings, pursuant to section 4.3 of Method 24, 40 CFR Part 60, Appendix A.
 - b. Emission Limitation:

770.0 lbs VOC/hr, including cleanup on a daily average basis; and 39.87 tons VOC per rolling 12-month period

Applicable Compliance Method:

Compliance shall be based on the record keeping requirements in Section C.1 of these terms and conditions.

c. Emission Limitation

The permittee shall not discharge into the atmosphere emissions of more than 0.20 kg VOC/kg coating solids applied, calculated as a mass-weighted average for each calendar month.

Applicable Compliance Method

Compliance shall be based upon the on the record keeping requirements in Section C.2. of these terms and conditions.

d. Emission Limitation

The permittee shall not discharge into the atmosphere emissions of more than 8 percent of the HAPs to coating solids applied (0.08 kg HAP/kg solids) , calculated as a mass-weighted average for each calendar month.

Applicable Compliance Method

Compliance shall be based upon the on the record keeping requirements in Section C.3 of these terms and conditions.

e. The permittee shall not discharge into the atmosphere emissions of more than 1.6 percent of the HAPs to the mass of coating, applied (0.016 kg HAP/kg solids) , calculated as a mass-weighted average for each calendar month.

Applicable Compliance Method

Compliance shall be based upon the on the record keeping requirements in Section C.3 of these terms and conditions.

f. Emission Limitation:

4.32 pounds per hour and 18.95 tons per year of Nitrogen Oxides (NOx)

Avery Dennison, Cleveland Films Facility

PTI Application: 02-10727

Issued

Facility ID: 0243081207

Emissions Unit ID: **K004**

Applicable Compliance Method:

Compliance shall be determined by multiplying the emission factor of 100 pounds NO_x per million cubic feet of natural gas (EPA AP-42, July 1998, Section 1.4, Natural Gas Combustion) by the maximum hourly natural gas combustion capacity (43,000 ft³/hr) of this emissions unit. If required by Ohio EPA, emission testing to determine compliance with the above emission limitation shall be performed, using method 1 - 4 and 7 of 40 CFR Part 60, appendix A.

Compliance with the annual limit shall be assumed providing that compliance with the hourly limit is established

g. Emission Limitation:

3.64 pounds per hour and 13.26 tons per year of CO

Applicable Compliance Method:

Compliance shall be determined by multiplying the emission factor of 84 pounds CO per million cubic feet of natural gas (EPA AP-42, July 1998, Section 1.4) by the maximum hourly natural combustion capacity (43,000 ft³/hr) of this emissions unit. If required by Ohio EPA, emission testing to determine compliance with the above emission limitation shall be performed, using method 1 - 4 and 10 of 40 CFR Part 60, appendix A.

Compliance with the annual limit shall be assumed providing that compliance with the hourly limit is established

2. USEPA Method 24 or GCMS, Capillary Column Technique Method 8260A shall be used to determine the VOC contents of the coating employed in this emissions unit.

F. Miscellaneous Requirements

None