

AIR EMISSION PERMIT NO. 12300718- 004

IS ISSUED TO

Hood Packaging Corporation

HOOD PACKAGING CORP - ARDEN HILLS

1887 Gateway Boulevard
Arden Hills, Ramsey County, MN 55112

The emission units, control equipment and emission stacks at the stationary source authorized in this permit are as described in the following permit application(s):

Permit Type	Permit Action	Application Date	Issuance Date
Total Facility Operating Permit	001	02/28/2000	08/30/2007
Total Facility Operating Permit - Reissuance	002	09/28/2004	11/07/2006
Minor Amendment (Application Returned)	003	04/30/2007	N/A
Major Amendment	004	05/02/2007	See Below

This permit supersedes permit number 12300718-002 and authorizes the Permittee to operate and modify the stationary source at the address listed above unless otherwise noted in Table A. The Permittee must comply with all the conditions of the permit. Any changes or modifications to the stationary source must be performed in compliance with Minn. R. 7007.1150 to 7007.1500. Terms used in the permit are as defined in the state air pollution control rules unless the term is explicitly defined in the permit.

Permit Type: Federal; Part 70/Limits to Avoid New Source Review (NSR)

Authorization to Construct and Operate (40 CFR § 52.21) Issuance Date: September 27, 2007

Final Permit Issuance Date: October 10, 2007

Expiration Date: 11/07/2011; Title I Conditions do not expire.

Jeff J. Smith, Manager
Air Quality Permits Section
Industrial Division

for Brad Moore
Commissioner
Minnesota Pollution Control Agency

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NOTICE TO THE PERMITTEE:

Your stationary source may be subject to the requirements of the Minnesota Pollution Control Agency's (MPCA) solid waste, hazardous waste, and water quality programs. If you wish to obtain information on these programs, including information on obtaining any required permits, please contact the MPCA general information number at:

Metro Area	651-296-6300
Outside Metro Area	1-800-657-3864
TTY	651-282-5332

The rules governing these programs are contained in Minn. R. chs. 7000-7105. Written questions may be sent to: Minnesota Pollution Control Agency, 520 Lafayette Road North, St. Paul, Minnesota 55155-4194.

Questions about this air emission permit or about air quality requirements can also be directed to the telephone numbers and address listed above.

PERMIT SHIELD:

Subject to the limitations in Minn. R. 7007.1800, compliance with the conditions of this permit shall be deemed compliance with the specific provision of the applicable requirement identified in the permit as the basis of each condition. Subject to the limitations of Minn. R. 7007.1800 and 7017.0100, subp. 2, notwithstanding the conditions of this permit specifying compliance practices for applicable requirements, any person (including the Permittee) may also use other credible evidence to establish compliance or noncompliance with applicable requirements.

FACILITY DESCRIPTION:

Hood Packaging Corporation produces printed plastic bags and sheets. Rolls of plastic are printed upon with one of the three flexographic printing presses at the facility. The sources of air emissions at the facility are the printing presses and their associated dryers. A catalytic oxidizer controls Volatile Organic Compound (VOC) emissions from all three of the presses at the facility.

PERMIT ACTION 004 DESCRIPTION:

Permit action 004 is an MPCA-initiated major amendment under Minn. R. 7007.1600, subp. 1 (D) – mandatory reopenings that are needed to assure compliance with applicable requirements. Permit action 004 includes a major amendment initiated by the Permittee.

The amendment revises limits and emission units in the permit. The limits have been imposed through performance testing under Minn. R. 7017.2025, subp. 3. The permit must be reopened in order to reflect the revised limits. See MPCA letter sent on January 19, 2007 to Hood Flexible Packaging (Permittee), which set new limits in the Permittee's Part 70 permit based on performance testing under Minn. R. ch. 7017. Emission unit EU003 will be replaced by emission unit EU005. The permit must be amended in order to reflect the replaced emission unit under Minn. R. ch.7007.1500, subp. 1(C).

TABLE A: LIMITS AND OTHER REQUIREMENTS**A-1**

10/10/07

Facility Name: Hood Packaging Corp - Arden Hills

Permit Number: 12300718 - 004

Table A contains limits and other requirements with which your facility must comply. The limits are located in the first column of the table (What To do). The limits can be emission limits or operational limits. This column also contains the actions that you must take and the records you must keep to show that you are complying with the limits. The second column of Table A (Why to do it) lists the regulatory basis for these limits. Appendices included as conditions of your permit are listed in Table A under total facility requirements.

Subject Item:**Total Facility**

What to do	Why to do it
OPERATIONAL REQUIREMENTS	hdr
The Permittee shall comply with National Primary and Secondary Ambient Air Quality Standards, 40 CFR pt. 50, and the Minnesota Ambient Air Quality Standards, Minn. R. 7009.0010 through Minn. R. 7009.0080. Compliance shall be demonstrated upon written request by the MPCA.	40 CFR pt. 50; Minn. Stat. Section 116.07, subd. 4a; Minn. Stat. Section 116.07, subd. 9; Minn. R. 7007.0100, subp. 7A; Minn. R. 7007.0100, subp. 7L; Minn. R. 7007.0100, subp. 7M; Minn. R. 7007.0800, subp. 1; Minn. R. 7007.0800, subp. 2; Minn. R. 7007.0800, subp. 4; Minn. R. 7009.0010 through Minn. R. 7009.0080.
Circumvention: Do not install or use a device or means that conceals or dilutes emissions, which would otherwise violate a federal or state air pollution control rule, without reducing the total amount of pollutant emitted.	Minn. R. 7011.0020
Air Pollution Control Equipment: Operate all pollution control equipment whenever the corresponding process equipment and emission units are operated, unless otherwise noted in Table A.	Minn. R. 7007.0800, subp. 2; Minn. R. 7007.0800, subp. 16(J)
Operation and Maintenance (O & M) Plan: Retain at the stationary source an operation and maintenance plan for all air pollution control equipment. At a minimum, the O & M plan shall identify all air pollution control equipment and control practices and shall include a preventive maintenance program for the equipment and practices, a description of the minimum but not necessarily the only corrective actions to be taken to restore the equipment and practices to proper operation to meet applicable permit conditions, a description of the employee training program for proper operation and maintenance of the control equipment and practices, and the records kept to demonstrate plan implementation.	Minn. R. 7007.0800, subp. 14; Minn. R. 7007.0800, subp. 16(J)
Operation Changes: In any shutdown, breakdown, or deviation the Permittee shall immediately take all practical steps to modify operations to reduce the emission of any regulated air pollutant. The Commissioner may require feasible and practical modifications in the operation to reduce emissions of air pollutants. No emissions units that have an unreasonable shutdown or breakdown frequency of process or control equipment shall be permitted to operate.	Minn. R. 7019.1000, subp. 4
Fugitive Emissions: Do not cause or permit the handling, use, transportation, or storage of any material in a manner which may allow avoidable amounts of particulate matter to become airborne. Comply with all other requirements listed in Minn. R. 7011.0150.	Minn. R. 7011.0150
Noise: The Permittee shall comply with the noise standards set forth in Minn. R. 7030.0010 through Minn. R. 7030.0080 at all times during the operation of any emission units. This is a state only requirement and is not enforceable by the EPA Administrator or citizens under the Clean Air Act.	Minn. R. 7030.0010 through Minn. R. 7030.0080
Inspections: The Permittee shall comply with the inspection procedures and requirements as found in Minn. R. 7007.0800, subp. 9(A).	Minn. R. 7007.0800, subp. 9(A)
The Permittee shall comply with the General Conditions listed in Minn. R. 7007.0800, subp. 16.	Minn. R. 7007.0800, subp. 16
PERFORMANCE TESTING	hdr
Performance Testing: Conduct all performance tests in accordance with Minn. R. ch. 7017 unless otherwise noted in Tables A and/or B.	Minn. R. ch. 7017
Limits set as a result of a performance test conducted before or after 11/07/06 apply until superseded as stated in the MPCA's Notice of Compliance letter granting preliminary approval. Preliminary approval is based on formal review of a subsequent performance test on the same unit as specified by Minn. R. 7017.2025, subp. 3. The limit is final upon issuance of a permit amendment incorporating the change.	Minn. R. 7017.2025, subp. 3
MONITORING REQUIREMENTS	hdr
Monitoring Equipment Calibration: Annually calibrate all required monitoring equipment.	Minn. R. 7007.0800, subp. 4(D)

TABLE A: LIMITS AND OTHER REQUIREMENTS**A-2**

10/10/07

Facility Name: Hood Packaging Corp - Arden Hills

Permit Number: 12300718 - 004

Operation of Monitoring Equipment: Unless otherwise noted in Tables A and/or B, monitoring a process or control equipment connected to that process is not necessary during periods when the process is shutdown, or during checks of the monitoring systems, such as calibration checks and zero and span adjustments. If monitoring records are required, they should reflect any such periods of process shutdown or checks of the monitoring system.	Minn. R. 7007.0800, subp. 4(D)
RECORDKEEPING	hdr
Recordkeeping: Retain all records at the stationary source for a period of five (5) years from the date of monitoring, sample, measurement, or report. Records which must be retained at this location include all calibration and maintenance records, all original recordings for continuous monitoring instrumentation, and copies of all reports required by the permit. Recordkeeping: Records must conform to the requirements listed in Minn. R. 7007.0800, subp. 5(A).	Minn. R. 7007.0800, subp. 5(A), Minn. R. 7007.0800, subp. 5(C)
Recordkeeping: Maintain records describing any insignificant modifications (as required by Minn. R. 7007.1250, subp. 3) or changes contravening permit terms (as required by Minn. R. 7007.1350 subp. 2) including records of the emissions resulting from those changes.	Minn. R. 7007.0800, subp. 5(B)
Equipment Labeling: The Permittee shall permanently affix a unique number to each emissions unit for tracking purposes. The numbers shall correlate the unit to the appropriate EU, GP, and CE numbers used in this permit. The number can be affixed by placard, stencil, or other means. The number shall be maintained so that it is readable and visible at all times from a safe distance. If equipment is added, it shall be given a new unique number; numbers from replaced or removed equipment shall not be reused.	Minn. R. 7007.0800, subp. 2
Equipment Inventory: The Permittee shall maintain a written list of all emission units and control equipment on site. The Permittee shall update the list to include any replaced, modified, or new equipment prior to making the change. The list shall correlate the units to the numbers used in this permit (EU, GP, CE) and shall include the data on GI-05B. The date of construction shall be the date the change was made for replaced, modified, or new equipment.	Minn. R. 7007.0800, subp. 2
REPORTING/SUBMITTALS	hdr
Shutdown Notifications: Notify the Commissioner at least 24 hours in advance of a planned shutdown of any control equipment or process equipment if the shutdown would cause any increase in the emissions of any regulated air pollutant. If the owner or operator does not have advance knowledge of the shutdown, notification shall be made to the Commissioner as soon as possible after the shutdown. However, notification is not required in the circumstances outlined in Items A, B and C of Minn. R. 7019.1000, subp. 3. At the time of notification, the owner or operator shall inform the Commissioner of the cause of the shutdown and the estimated duration. The owner or operator shall notify the Commissioner when the shutdown is over.	Minn. R. 7019.1000, subp. 3
Breakdown Notifications: Notify the Commissioner within 24 hours of a breakdown of more than one hour duration of any control equipment or process equipment if the breakdown causes any increase in the emissions of any regulated air pollutant. The 24-hour time period starts when the breakdown was discovered or reasonably should have been discovered by the owner or operator. However, notification is not required in the circumstances outlined in Items A, B and C of Minn. R. 7019.1000, subp. 2. At the time of notification or as soon as possible thereafter, the owner or operator shall inform the Commissioner of the cause of the breakdown and the estimated duration. The owner or operator shall notify the Commissioner when the breakdown is over.	Minn. R. 7019.1000, subp. 2
Notification of Deviations Endangering Human Health or the Environment: As soon as possible after discovery, notify the Commissioner or the state duty officer, either orally or by facsimile, of any deviation from permit conditions which could endanger human health or the environment.	Minn. R. 7019.1000, subp. 1
Notification of Deviations Endangering Human Health or the Environment Report: Within 2 working days of discovery, notify the Commissioner in writing of any deviation from permit conditions which could endanger human health or the environment. Include the following information in this written description: 1. the cause of the deviation; 2. the exact dates of the period of the deviation, if the deviation has been corrected; 3. whether or not the deviation has been corrected; 4. the anticipated time by which the deviation is expected to be corrected, if not yet corrected; and 5. steps taken or planned to reduce, eliminate, and prevent recurrence of the deviation.	Minn. R. 7019.1000, subp. 1

TABLE A: LIMITS AND OTHER REQUIREMENTS**A-3**

10/10/07

Facility Name: Hood Packaging Corp - Arden Hills

Permit Number: 12300718 - 004

Application for Permit Amendment: If a permit amendment is needed, submit an application in accordance with the requirements of Minn. R. 7007.1150 through Minn. R. 7007.1500. Submittal dates vary, depending on the type of amendment needed.	Minn. R. 7007.1150 through Minn. R. 7007.1500
Extension Requests: The Permittee may apply for an Administrative Amendment to extend a deadline in a permit by no more than 120 days provided the proposed deadline extension meets the requirements of Minn. R. 7007.1400, subp. 1(H).	Minn. R. 7007.1400, subp. 1(H)
Emission Inventory Report: due on or before April 1 of each calendar year following permit issuance. The Permittee shall submit this on a form approved by the Commissioner.	Minn. R. 7019.3000 through Minn. R. 7019.3100
Emission Fees: due 60 days after receipt of an MPCA bill.	Minn. R. 7002.0005 through Minn. R. 7002.0095

TABLE A: LIMITS AND OTHER REQUIREMENTS**A-4**

10/10/07

Facility Name: Hood Packaging Corp - Arden Hills

Permit Number: 12300718 - 004

Subject Item: GP 001 Total Facility Limits**Associated Items:** EU 002 Press 10DF8CNC

EU 004 Press 34DF8CNC

EU 005 Press PCMC Infinity

What to do	Why to do it
EMISSION LIMITS	hdr
<p>Volatile Organic Compounds: less than or equal to 221.70 tons/year using 12-month Rolling Sum to be calculated by the 15th day of each month for the previous 12-month period as described later in this permit.</p> <p>All emission units or stacks added to GP 001 as allowed in this permit shall be included in this calculation. VOC contents for each VOC-containing material shall be determined as described under the Material Content requirement.</p>	<p>Title I Condition: To avoid classification as major source and modification under 40 CFR Section 52.21; Minn. R. 7007.3000</p>
<p>All non-combustion VOC-emitting equipment and activities, other than those activities listed in the Appendix, at the Facility is subject to this limit.</p> <p>If the Permittee replaces any existing VOC-emitting equipment, adds new VOC-emitting equipment, or modifies the existing equipment, such equipment is subject to this permit limit as well as all of the requirements listed at the Total Facility Level. Prior to making such a change, the Permittee shall apply for and obtain the appropriate permit amendment, as applicable. The Permittee is not required to repeat VOC calculations described in Minn. R. 7007.1200, subp. 2.</p> <p>A permit amendment will still be needed regardless of the emissions increase if the change will be subject to a new applicable requirement or requires revisions to the limits or monitoring and recordkeeping in this permit.</p>	<p>Title I Condition: To avoid classification as major source and modification under 40 CFR Section 52.21; Minn. R. 7007.3000</p>
Total Particulate Matter: less than or equal to 0.30 grains/dry standard cubic foot of exhaust gas unless required to further reduce emissions to comply with the less stringent limit of either Minn. R. 7011.0730 or Minn. R. 7011.0735. The PTE for PM is 0.00037 grains/dry standard cubic foot.	Minn. R. 7011.0715, subp. 1(A)
Opacity: less than or equal to 20.0 percent .	Minn. R. 7011.0715, subp. 1(B)
OPERATIONAL REQUIREMENTS	hdr
The Permittee shall limit the operation of each emission unit to Operating Hours: less than or equal to 6390.0 hours/year using 12-month Rolling Sum	Title I Condition: To avoid classification as major source and modification under 40 CFR Section 52.21; Minn. R. 7007.3000
General: Route all non-combustion VOC-emitting equipment and activity emissions from EU 002, EU 004, and EU 005 to the catalytic oxidizer at all times.	Title I Condition: To avoid classification as major source and modification under 40 CFR Section 52.21; Minn. R. 7007.3000
RECORDKEEPING	hdr
<p>Recordkeeping VOC Emissions:</p> <p>1. On each day of operation, the Permittee shall calculate, record, and maintain the total quantity of VOC for all coatings used at the facility. This shall be based on written usage logs.</p> <p>2. At the end of each calendar month of operation, the Permittee shall calculate, record, and maintain the total quantity of VOC for all other VOC containing materials used at the facility. This shall be based on delivery or purchase records.</p>	<p>Title I Condition: To avoid classification as major source and modification under 40 CFR Section 52.21; Minn. R. 7007.3000</p>
<p>Monthly Recordkeeping - VOC Emissions:</p> <p>By the 15th of the month, the Permittee shall calculate and record the following:</p> <p>1) The total usage of VOC containing materials for the previous calendar month using the daily usage records for all coatings and delivery or purchase records for all other VOC containing materials. This record shall also include the VOC and solids contents of each material as determined by the Material Content requirement of this permit.</p> <p>2) The VOC emissions for the previous month using the formulas specified in this permit.</p> <p>3) The 12 month rolling sum VOC emissions for the previous 12 month period by summing the monthly VOC emissions data for the previous 12 months.</p>	<p>Minn. R. 7007.0800, subp. 4; Minn. R. 7007.0800, subp. 5</p>

TABLE A: LIMITS AND OTHER REQUIREMENTS**A-5**

10/10/07

Facility Name: Hood Packaging Corp - Arden Hills

Permit Number: 12300718 - 004

<p>Recordkeeping: 1) the total facility VOC use for each month shall be determined as follows;</p> $U = U_i + U_s - U_w$ $U_s = 1(V1s + A_s - V2s)$ <p>where,</p> <p>U = total facility VOC use per month (lb VOC/mo) U_i = total facility VOC use per month from inks (lb VOC/mo) U_s = total facility VOC use per month from solvents (lb VOC/mo) U_w = total facility VOC waste per month from solvents and inks (lb VOC/mo) 1 = VOC content of the solvents (100 %) $V1s$ = total weight of solvents at the facility at the start of the month (lb solvent) A_s = all additions of solvents received for the month (lb solvent) $V2s$ = total weight of solvents at the facility at the end of the month (lb solvent)</p>	Minn. R. 7007.0800, subp. 5
<p>Recordkeeping: 2) the VOC emissions for the facility shall be determined each month as follows;</p> $E = (1 - CE)U$ <p>where,</p> <p>E = total facility VOC emissions, reflecting control equipment operation CE = control efficiency of the catalytic oxidizer (61%) U = total facility VOC use per month (lb VOC/mo), see previous requirement</p>	Minn. R. 7007.0800, subp. 5
<p>Daily Recordkeeping - Operating Hours: On each day of operation, the Permittee shall record and maintain the number of operating hours of each emission unit.</p>	Title I Condition: To avoid classification as major source and modification under 40 CFR Section 52.21; Minn. R. 7007.3000
<p>Monthly Recordkeeping - Operating Hours: By the 15th of the month, the Permittee shall calculate and record the following: 1) The total number of operating hours for each emission unit for the previous calendar month. This shall be based on the readings from the hour meter on each press. 2) The 12 month rolling sum of the operating hours for each emission unit for the previous 12 month period by summing the monthly operating hours data for the previous 12 months.</p>	Minn. R. 7007.0800, subp. 4; Minn. R. 7007.0800, subp. 5
<p>Material Content: VOC, HAPs, and Solids contents in inks and solvents shall be determined by the Material Safety Data Sheet (MSDS) provided by the supplier for each material used. If a material content range is given on the MSDS, the highest number in the range shall be used in all compliance calculations. When using the MSDS as the basis of calculating particulate emissions, the conservative assumption is made that PM consists entirely of PM less than 10 micrometers. Other alternative methods approved by the MPCA may be used to determine the VOC, HAPs, and Solids contents. The Commissioner reserves the right to require the Permittee to determine the VOC, HAP, and Solids contents of any material, according to EPA or ASTM reference methods. If an EPA or ASTM reference method is used for material content determination, the data obtained shall supersede the MSDS.</p>	Minn. R. 7007.0800, subp. 4; Minn. R. 7007.0800, subp. 5
<p>Waste Credit: If the Permittee elects to obtain credit for VOC shipped in waste materials, the Permittee shall either use item 1 or 2 to determine the VOC content for each credited shipment. 1) The Permittee shall analyze a composite sample of each waste shipment to determine the weight content of VOC excluding water. 2) The Permittee may use supplier data for raw materials to determine the VOC content of each waste shipment, using the same content data used to determine the content of raw materials. If the waste contains several materials, the content of mixed waste shall be assumed to be the lowest VOC content of any of the materials.</p>	Minn. R. 7007.0800, subp. 4; Minn. R. 7007.0800, subp. 5

TABLE A: LIMITS AND OTHER REQUIREMENTS

A-6

10/10/07

Facility Name: Hood Packaging Corp - Arden Hills

Permit Number: 12300718 - 004

Subject Item: CE 001 Catalytic Afterburner w/Heat Exchanger**Associated Items:** EU 002 Press 10DF8CNC

EU 004 Press 34DF8CNC

EU 005 Press PCMC Infinity

What to do	Why to do it
EMISSION LIMITS	hdr
Volatile Organic Compounds: greater than or equal to 64.0 percent capture efficiency demonstrated during the most recent performance test.	Title I Condition: To avoid classification as major source and modification under 40 CFR Section 52.21; Minn. R. 7007.3000
The Permittee shall operate and maintain control equipment such that it achieves destruction efficiency for Volatile Organic Compounds: greater than or equal to 95.0 percent destruction efficiency	Title I Condition: To avoid classification as major source and modification under 40 CFR Section 52.21; Minn. R. 7007.3000
POLLUTION CONTROL EQUIPMENT REQUIREMENTS	hdr
Operating Requirements: The Permittee shall operate and maintain the catalytic oxidizer (CE 001) any time that non-combustion VOC-emitting activities are occurring at any process equipment controlled by the catalytic oxidizer. The Permittee shall document periods of non-operation of the control equipment.	Title I Condition: To avoid classification as major source and modification under 40 CFR Section 52.21; Minn. R. 7007.3000
For periods when the catalytic oxidizer is operated above the minimum combustion inlet and outlet temperatures, the Permittee shall use either one of the following when completing calculations as required elsewhere in this permit: a. The overall control efficiency limit specified in this permit for this equipment (95.0%); or b. The overall control efficiency determined during the most recent MPCA approved performance test. If the tested efficiency is less than the efficiency limit in this permit, the Permittee must use the tested value in all calculations until the efficiency is demonstrated to be above the permit limit through a new test.	Title I Condition: To avoid classification as major source and modification under 40 CFR Section 52.21; Minn. R. 7007.3000
Operation and Maintenance Plan: The Permittee shall operate and maintain the catalytic oxidizer in accordance with the O & M Plan. The Permittee shall keep copies of the O & M Plan available onsite for use by staff and MPCA staff.	40 CFR Section 64.7(b); Minn. R. 7017.0200
TEMPERATURE AND MONITORING REQUIRMENTS	hdr
Temperature: greater than or equal to 650 degrees F using 3-hour Average at the combustion chamber inlet and outlet, unless a new limit is set pursuant to Minn. R. 7017.0205, subp. 3 based on the values recorded during the most recent MPCA-approved performance test where compliance was demonstrated. The new limit shall be implemented upon receipt of the Notice of Compliance letter granting preliminary approval. The limit is final upon issuance of a permit amendment incorporating the change. If the 3-hour rolling average temperature is below the minimum temperature limit, the VOC emitted during that time shall be considered uncontrolled until the average temperature is above the minimum temperature limit. This shall be reported as a deviation.	Title I Condition: To avoid classification as major source and modification under 40 CFR Section 52.21; Minn. R. 7007.3000
If at any time the measured combustion chamber inlet and/or outlet temperatures drop below the minimum temperature requirement established during the most recent performance test, calculate 3-hour average combustion chamber inlet and/or outlet temperatures for each 3-hour block during the 12 hours immediately prior to and the 12 hours immediately following the time that the combustion chamber inlet and/or outlet temperatures dropped below the minimum temperature requirement. If any of the calculated 3-hour average combustion chamber inlet and/or outlet temperatures are below the minimum temperature requirement, this incident shall be considered a deviation, reportable as described elsewhere in this permit.	Title I Condition: To avoid major source classification under 40 CFR Section 52.21; Minn. R. 7007.3000
Monitoring Equipment: The Permittee shall install and maintain thermocouples to conduct temperature monitoring required by this permit. The monitoring equipment must be installed, in use, and properly maintained whenever operation of the monitored control equipment is required.	40 CFR Section 64.7(b); Minn. R. 7017.0200
Temperature Monitoring: The Permittee shall maintain and operate thermocouple monitoring devices that continuously indicate and record the combustion chamber inlet and outlet temperatures of the catalytic oxidizer. The monitoring device shall have a margin of error less than the greater of ± 0.75 percent of the temperature being measured or ± 2.5 degree Celsius. The recording device shall also calculate the 3-hour rolling average combustion chamber inlet and outlet temperatures. Recorded values outside the range specified in this permit are considered deviations as defined by Minn. R. 7007.0100, subp. 8a.	Title I Condition: To avoid classification as a major source and modification under 40 CFR Section 52.21; Minn. R. 7007.3000; 40 CFR Section 64.3(b)(4)(ii); Minn. R. 7017.0200
Daily Monitoring: The Permittee shall physically verify the operation of the temperature recording device at least once each operating day to verify that it is working and recording properly. The Permittee shall maintain a written record of the daily verifications.	Title I Condition: To avoid classification as a major source and modification under 40 CFR Section 52.21; Minn. R. 7007.3000; 40 CFR Section 64.3(b); Minn. R. 7017.0200

TABLE A: LIMITS AND OTHER REQUIREMENTS**A-7**

10/10/07

Facility Name: Hood Packaging Corp - Arden Hills

Permit Number: 12300718 - 004

Monthly Monitoring: At least once each month during normal operation, the Permittee shall record the temperature rise across the catalyst (combustion chamber outlet temperature minus combustion chamber inlet temperature) while the process is running. If it is determined that the catalyst reactivity has been impaired, by comparison of the observed temperature rise to the past temperature rise records, the Permittee shall follow the corrective actions in the O & M Plan. The Permittee shall maintain written records of the monitoring and any corrective actions taken.	Minn. R. 7007.0800, subp. 4; Minn. R. 7007.0800, subp. 5; Minn. R. 7007.0800, subp. 14
Documentation of Need for Improved Monitoring: If the Permittee fails to achieve compliance with an emission limitation or standard for which the monitoring did not provide an indication of an excursion or exceedance while providing valid data, or the results of compliance or performance testing document a need to modify the existing pressure drop range, the Permittee shall promptly notify the MPCA and, if necessary, submit a permit amendment application to address the necessary monitoring changes.	40 CFR Section 64.7(e); Minn. R. 7017.0200
The Permittee shall maintain records of monitoring data, monitor performance data, corrective actions taken, and other supporting information required to be maintained. The Permittee may maintain records on alternative media such as microfilm, computer files, magnetic tape disks, or microfiche provided that the use of such alternative media allows for expeditious inspection and review and does not conflict with other applicable recordkeeping requirements.	40 CFR Section 64.9(b); Minn. R. 7017.0200
STACK TESTING REQUIREMENTS	hdr
Performance Notifications and Submittals: Performance Tests are due as outlined in Table A of the permit. Performance Test Notification (written): due 30 days before each Performance Test to measure VOC capture and destruction efficiency. Performance Test Plan: due 30 days before each Performance Test to measure VOC capture and destruction efficiency. Performance Test Pre-test Meeting: due 7 days before each Performance Test to measure VOC capture and destruction efficiency. Performance Test Report: due 45 days after each Performance Test to measure VOC capture and destruction efficiency. Performance Test Report - Microfiche Copy: due 105 days after each Performance Test to measure VOC capture and destruction efficiency. The Notification, Test Plan, and Test Report may be submitted in alternative format as allowed by Minn. R. 7017.2018.	Minn. R. 7017.2030, subp. 1 through Minn. R. 7017.2030, subp. 4; Minn. R. 7017.2018; Minn. R. 7017.2035, subp. 1 through Minn. R. 7017.2035, subp. 2
Performance Test: due before end of each 60 months starting 09/24/2001 to measure VOC capture and destruction efficiency.	Minn. R. 7017.2020, subp. 1
CATALYST SAMPLING AND ANALYSIS	hdr
Sample Analysis: due before end of each 24 months following Permit Issuance. The Permittee shall send a representative sample of the catalyst to a laboratory to test the catalyst's destruction efficiency. If test results show a destruction efficiency of less than 95.0%, the Permittee shall follow the corrective actions contained in the O & M Plan.	Title I Condition: To avoid classification as major source and modification under 40 CFR Section 52.21; Minn. R. 7007.3000
Quarterly Inspections: At least once per calendar quarter, the Permittee shall inspect the control equipment internal and external system components, including but not limited to the refractory, heat exchanger, and electrical systems. The Permittee shall maintain a written record of the inspection and any corrective actions taken resulting from the inspection.	40 CFR Section 64.3; Minn. R. 7017.0200
Annual Inspection: At least once per calendar year, the Permittee shall conduct an internal inspection of the control device that includes all operating systems of the control device. The Permittee shall maintain a written record of the inspection and any action resulting from the inspection.	40 CFR Section 64.3; Minn. R. 7017.0200
Corrective Actions: If the combustion chamber inlet and/or outlet temperatures are below the minimum specified by this permit or if the catalytic oxidizer or any of its components are found during the inspections to need repair, the Permittee shall take corrective action as soon as possible. Corrective actions shall return the combustion chamber inlet and/or outlet temperatures to at least the permitted minimum and/or include completion of necessary repairs identified during the inspection, as applicable. Corrective actions include but are not limited to those outlined in the O & M Plan for the catalytic oxidizer. The Permittee shall keep a record of the type and date of any corrective actions taken.	40 CFR Section 64.7(d); Minn. R. 7017.0200
RECORDKEEPING/REPORTING REQUIREMENTS	hdr
Recordkeeping: The Permittee shall maintain a continuous hard copy readout or computer disk file of the combustion chamber inlet and outlet temperature readings and the calculated 3-hour rolling average combustion chamber inlet and outlet temperatures.	Title I Condition: To avoid classification as a major source and modification under 40 CFR Section 52.21; Minn. R. 7007.3000; 40 CFR Section 64.9(b); Minn. R. 7017.0200

TABLE A: LIMITS AND OTHER REQUIREMENTS**A-8**

10/10/07

Facility Name: Hood Packaging Corp - Arden Hills

Permit Number: 12300718 - 004

Annual Calibration: The Permittee shall calibrate the temperature monitors at least annually and shall maintain a written record of the calibration and any actions resulting from the calibration.	40 CFR Section 64.3; Minn. R. 7017.0200
Monitoring QA/QC: Conduct a test of the inlet and outlet temperature monitors at least annually. The temperature monitor must be within +/- 5.0 degrees Fahrenheit of the reference temperature monitor. Verify the accuracy of the temperature monitor with a reference temperature monitor (traceable to National Institute of Standards and Technology (NIST) standards or an independent temperature measurement device dedicated for this purpose). During accuracy checking, the probe of the reference device shall be placed as close as physically practical to the location as that of the temperature monitor being tested, such that representative temperature measurements are obtained.	40 CFR Section 64.3; Minn. R. 7017.0200; Minn. R. 7007.0800, subp. 4; Minn. R. 7007.0800, subp. 5; Minn. R. 7007.0800, subp. 14
Initial Hood Certification and Evaluation: The control device hood must conform to the requirements listed in Minn. R. 7011.0070, subp. 1 and the Permittee shall certify this as specified in Minn. R. 7011.0070, subp. 3. The Permittee shall maintain a copy of the evaluation and certification on site.	Minn. R. 7007.0800, subp. 4; Minn. R. 7007.0800, subp. 5; Minn. R. 7007.0800, subp. 14
Annual Hood Evaluation: The Permittee shall measure and record at least once every 12 months the fan rotation speed, fan power draw, or face velocity of each hood, or other comparable air flow indication method. The Permittee shall maintain a copy of the annual evaluation on site.	Minn. R. 7007.0800, subp. 4; Minn. R. 7007.0800, subp. 5; Minn. R. 7007.0800, subp. 14
As required by 40 CFR Section 64.9(a)(2), for the Semi-Annual Deviations Report listed in Table B of this permit and/or the Notification of Deviations Endangering Human Health and the Environment listed earlier in Table A of this permit, as applicable, the Permittee shall include the following related to the monitoring identified as required by 40 CFR pt. 64: 1) Summary information on the number, duration, and cause of excursions or exceedances, as applicable, and the corrective action taken; and 2) Summary information on the number, duration, and cause for monitor downtime incidents.	40 CFR Section 64.9(a)(2); Minn. R. 7017.0200

TABLE B: SUBMITTALS

B-1 10/10/07

Facility Name: Hood Packaging Corp - Arden Hills
Permit Number: 12300718 - 004

Also, where required by an applicable rule or permit condition, send to the Permit Technical Advisor notices of:

- accumulated insignificant activities,
- installation of control equipment,
- replacement of an emissions unit, and
- changes that contravene a permit term.

Table B lists most of the submittals required by this permit. Please note that some submittal requirements may appear in Table A or, if applicable, within a compliance schedule located in Table C. Table B is divided into two sections in order to separately list one-time only and recurrent submittal requirements.

Each submittal must be postmarked or received by the date specified in the applicable Table. Those submittals required by parts 7007.0100 to 7007.1850 must be certified by a responsible official, defined in Minn. R. 7007.0100, subp. 21. Other submittals shall be certified as appropriate if certification is required by an applicable rule or permit condition.

Send submittals that are required to be submitted to the U.S. EPA regional office to:

Mr. George Czerniak
Air and Radiation Branch
EPA Region V
77 West Jackson Boulevard
Chicago, Illinois 60604

Send any application for a permit or permit amendment to:

AQ Permit Technical Advisor
Industrial Division
Minnesota Pollution Control Agency
520 Lafayette Road North
St. Paul, Minnesota 55155-4194

Send submittals that are required by the Acid Rain Program to:

U.S. Environmental Protection Agency
Clean Air Markets Division
1200 Pennsylvania Avenue NW (6204N)
Washington, D.C. 20460

Unless another person is identified in the applicable Table, send all other submittals to:

AQ Compliance Tracking Coordinator
Industrial Division
Minnesota Pollution Control Agency
520 Lafayette Road North
St. Paul, Minnesota 55155-4194

TABLE B: ONE TIME SUBMITTALS OR NOTIFICATIONS

Facility Name: Hood Packaging Corp - Arden Hills
Permit Number: 12300718 - 004

What to send	When to send	Portion of Facility Affected
Application for Permit Reissuance	due 180 days before 11/07/2011.	Total Facility

TABLE B: RECURRENT SUBMITTALS**B-3** 10/10/07

Facility Name: Hood Packaging Corp - Arden Hills

Permit Number: 12300718 - 004

What to send	When to send	Portion of Facility Affected
Semiannual Deviations Report	due 30 days after end of each calendar half-year starting 08/30/2000. The first semiannual report submitted by the Permittee shall cover July 1 - December 31, 2006. The first report of each calendar year covers January 1 - June 30. The second report of each calendar year covers July 1 - December 31. If no deviations have occurred, the Permittee shall submit the report stating no deviations.	Total Facility
Compliance Certification	due 31 days after end of each calendar year starting 08/30/2000 (for the previous calendar year). The Permittee shall submit this on a form approved by the Commissioner to both the Commissioner and to the US EPA regional office in Chicago. This report covers all deviations experienced during the calendar year.	Total Facility

APPENDIX MATERIAL

Facility Name: Hood Flexible Packaging – Arden Hills

Permit Number: 12300718-004

Insignificant Activities required to be listed in the permit

The table below lists the insignificant activities that are currently at the facility and their associated general applicable requirements.

Minn. R. 7007.1300, subp.	Rule Description of the Activity	General Applicable Requirement
3(A)	Fuel Use:	
	Space heaters fueled by kerosene, natural gas, or propane	
	One space heater (natural gas fuel): 200,000 Btu/hr	Minn. R. 7011.0515
3(B)(2)	Furnaces and boilers:	
	Fuel burning equipment of less than 500,000 Btu/hr capacity except where total capacity of equipment exceeds 2,000,000 Btu/hr when operated by one stationary source.	Minn. R. 7011.0515
3(E)(2)	Storage tanks:	
	Non-hazardous air pollutant VOC storage tanks with a combined total tank capacity of not more than 10,000 gallons of non-hazardous air pollutant VOCs and with a vapor pressure of not more than 1.0 psia at 60 degrees Fahrenheit.	
	Tank ID #001 1,000 gallon Solvent Storage Tank Tank ID #002 3,000 gallon Solvent Storage Tank Tank ID #003 30 gallon Solvent Storage Tank Tank ID #004 30 gallon Solvent Storage Tank	Minn. R. 7011.0715
3(F)	Cleaning operations:	
	Centrifuge – used to extract excess clean-up solvent from cleaning rags	Minn. R. 7011.0715
3(H)(4)	Miscellaneous:	
	Brazing, soldering, or welding equipment	Minn. R. 7011.0715
3(I)	Individual emission units at a stationary source which each have a potential to emit for each of the following pollutants less than : (1) 2 tons per year of CO; (2) 1 ton per year of each of NO _x , SO ₂ , PM, PM ₁₀ , VOCs, and ozone.	
	Dryer at a rated capacity of 0.36 MM Btu/hr	Minn. R. 7011.0610
4	Emission units with emissions less than A. 5.7 lbs/hr of CO B. potential emissions of 2.28 lbs/hr or actual emissions of 1 ton per year for each of NO _x , SO ₂ , PM, PM ₁₀ , VOCs	
	Dryers at a rated capacity of 2.3 MM Btu/hr, 1.6 MM Btu/hr, 2.4 MM Btu/hr, and 3.5 MM Btu/hr	Minn. R. 7011.0610

TECHNICAL SUPPORT DOCUMENT
For
AIR EMISSION PERMIT NO. 12300718-004

This technical support document is intended for all parties interested in the permit and to meet the requirements that have been set forth by the federal and state regulations (40 CFR § 70.7(a)(5) and Minn. R. 7007.0850, subp.1). The purpose of this document is to provide the legal and factual justification for each applicable requirement or policy decision considered in the determination to issue the permit.

1. General Information

1.1. Applicant and Stationary Source Location

Applicant/Address	Stationary Source/Address (SIC Code: 2759)
1887 Gateway Blvd Arden Hills Ramsey County	1887 Gateway Blvd Arden Hills Ramsey County
Contact: Mr. Gary Hilliard Phone: 651-636-2500	

Hood Packaging in Arden Hills is a manufacturer of printed plastic bags. The main contributing sources of air emissions are inks and solvents from three printing presses (GP001 comprised of EU002, EU004, and EU005) each of which limited to a total of 6390 hours of operation per year. The pollutant of concern from the processes is Volatile Organic Compounds (VOC). A catalytic oxidizer is used as the pollution control equipment (CE001) vented to a single emission stack (SV001).

1.2. Reason for Permit Action

This permit amendment is a Minnesota Pollution Control Agency (MPCA)-initiated major amendment under Minn. R. 7007.1600, subp. 1(D); mandatory reopening that is needed in order to assure compliance with applicable requirements.

The amendment incorporates new or revised limits into the referenced permit. The limits have been imposed through performance testing under Minn. R. 7017.2025, subp. 3 and are already in affect. The permit must be reopened in order to reflect the revised limits.

Additional changes to the permit were also made at this time. All changes meet the requirements of Minn. R. 7007.1600, subp. 1 or 2 or are in response to permit applications or notifications submitted by the Permittee.

1.3 Description of the Activities Allowed by this Permit Action

Attachment 1 to this TSD contains the Notice of Compliance (NOC) letter dated January 19, 2007: Performance Test on the catalytic oxidizer (CE001), combustion chamber inlet and outlet minimum temperatures based on 3-hour block averages is 650°F.

This document supports a reopening increasing the CE001 operating temperature as stated above. It was determined that the control equipment (CE001) is subject to Compliance Assurance Monitoring (CAM). A Major Amendment will be rolled in and the modification allowed by this permit action is the replacement of old emission unit (EU003) with a new emission unit (EU005). Capture and control processes are affected by the modification. The main pollutant of concern is still VOC.

Table 1. Regulatory Overview of Changes

Level	Old and New Limits / Changes	Basis
CE001	<u>Old:</u> 549°F <u>New:</u> 650°F, 3-hour block averages	January 19, 2007 letter from MPCA implementing Minn. R. 7017.2025, subp. 3
CE001	CAM requirements added	40 CFR Part 64
GP001	Replace EU003 with EU005	Permittee submitted a major amendment permit application on May 2, 2007

1.4. Facility Emissions

Table 2. Title I Emissions Increase Summary

Pollutant	Emissions Increase from the Modification (tpy)	Limited Emissions Increase from the Modification (tpy)	Source-wide Contemporaneous Increases and Decreases* (tpy)	Net Emissions Increase (tpy)	PSD/112(g) Significant Thresholds for major sources	NSR/112(g) Review Required? (Yes or No)
PM	0	0	NA	0	250	No
PM ₁₀	0	0	NA	0	250	No
NO _x	0	0	NA	0	250	No
SO ₂	0	0	NA	0	250	No
CO	0	0	NA	0	250	No
Ozone (VOC)	933	84.7	NA	0	250	No
Lead	0	0	NA	0	250	No
Individual / Total HAPs	0	0	NA	0	10/25	No

* Other emission changes during the contemporaneous period as defined by 40 CFR § 52.21, 40 CFR § 52.24 or 40 CFR pt.

Table 3. Facility Classification

Classification	Major/Affected Source	Synthetic Minor	Minor
PSD	No	Yes	No
Part 70 Permit Program	Yes	No	No
Part 63 NESHAP	No	No	Yes

2. Regulatory and/or Statutory Basis

New Source Review

The facility is not an existing major stationary source subject to New Source Review (NSR) regulations due to permit limits to avoid PSD.

Part 70 Permit Program

The facility is a major source under the Part 70 permit program with limits to avoid PSD.

New Source Performance Standards (NSPS)

There is no NSPS applicable to the operations at this facility.

National Emission Standards for Hazardous Air Pollutants (NESHAP)

There is no NESHAP applicable to the operations at this facility under 40 CFR pt. 61 and 40 CFR pt. 63.

Minnesota State Rules

In general, the facility is subject to Minnesota Standards of Performance Minn. R. 7011.0715.

Table 4. Regulatory Overview of Units Affected by the Modification/Permit Amendment

EU, GP, or SV	Applicable Regulations	Comments:
CE 001	40 CFR Section 64	CAM was necessary at reissuance.
GP 001	40 CFR Section 52.21 and Minn. R. 7007.3000	Operational limits and controls taken to keep the actual emissions under 221.7 TPY for VOC (limits established in previous permit actions).

3. Technical Information

3.1 Changes to Permit

This permit action includes the following changes and updates:

- The facility description was:
 - updated to indicate removal of EU003 and installation of EU005.
 - updated to include information regarding construction, operation, and removal dates of emission units.

- reorganized, properly grouped.
- Cleanup solvents are same as solvents used to achieve ink running viscosities and are included in the overall mass balance for VOCs.
- Ink inventory provides the amount of solvents in the ink in lbs VOC at 100%, not 70%.
- With the exception of SV002, all stacks are attached to vents to allow air flow for motors to ramp down. To appease a complaining neighbor, the stacks draw ambient air from higher up.
- Changes to permit requirements and citations
 - Updated existing requirements and citations.
 - Reorganized requirements.
 - Added initial hood certification and evaluation.
 - Added annual hood evaluation.
 - Added waste credit.
 - Added control efficiency options.
 - Added monthly monitoring of temperature rise across catalyst bed.

3.2 Corrections to Application

The following changes correct omissions and errors in the application:

- CH-00: 2) Applicable Analyses: [nothing checked] was [third one checked] (PSD permit is not required because the proposed modifications do not result in a net emissions increase).
- Throughout application:
 - AQ Facility ID No.: 12300718 was 12300718-002 (permit action, not facility).
 - AQ File NO. 2779B was 2779-94-OT-1 (outdated).
- CH-01: 3) ☒ Yes was [not checked]
- CH-03:
 - 6) ☒ YES was ☒ NO (replacement of EU003 with EU005)
 - 8) ☒ NO was ☒ YES (reference 6) above)
- CH-04:
 - 3) ☒ No was ☒ Yes (PAL not in permit action 12300718-002)
 - 4) ☐ Yes was ☒ Yes (skipped based on answer for 3) above)
 - 5) ☐ YES was ☒ YES (skipped based on answer for 4) above)
- CH-05: Not needed (reference CH-03) and therefore not reviewed for completeness or correctness
- CH-06: Not needed (reference CH-03) and therefore not reviewed for completeness or correctness
- CH-07: Not needed (reference CH-03) and therefore not reviewed for completeness or correctness
- CH-11: 2) ☒ Above Part 70 Threshold was ☒ Below all permit thresholds (Unlimited PTE above 250 TPY of VOC)

- CH-13:
 - 5a) ☒ Yes was ☒ No (NSPS not applicable and printing presses are not regulated by MN Rules Standard of Performance)
 - 5c) ☒ No was ☐ No (the presses do not have particulate control equipment)
 - 5d) ☒ No was ☐ No (no modeling has been performed)
 - Table 2 for EU002, EU004, and EU005: ☒ Not in operation before July 9, 1969 was ☐ Not in operation before July 9, 1969 (relatively newer presses)
 - Table 2 for EU002, EU004, and EU005: ☒ .3 gr/dscf was ☐ ____ gr/dscf (Minn. R. 7011.0715, subp. 1(A))
- CH-14: ☒ GI-05a was ☐ GI-05a
 - The same control equipment is being used since reissuance.
 - Control equipment information in Delta Central File was used instead of having Permittee submit GI-05a.
- CD-01:
 - Incomplete, emission units not properly referenced, temperature too low
 - OK, correct information will be taken from permit
- GI-05b: 3b)
 - for EU004 SV ID No(s). 002 was 003
 - for EU005 SV ID No(s). 002 was N/A
- GI-07: 1) 12300718 was [blank]
- GI-07: 4) Total Facility Potential Lim for PM should be 0.0637 (miscalculated result was 0.637)
- GI-07: 4) Total Facility Potential Unc for PM10 should be 0.0874 (miscalculated result was 0.019)
- EC-09:
 - 5) Stack/Vent Designation Number: 002 was 001
 - 10) Ink/solvent blends do not correspond to emission numbers. Emission calculations were submitted as an attachment to the application.
- EC-01: 4) Stack/Vent Designation Number: 002 was 001

3.3 Calculations of Potential to Emit

Attachment 2 to this TSD contains a detailed spreadsheet summarizing the permitted VOC PTE of the source and includes permit limits.

EU005 uses an internal electric dryer and will emit no CO, NO_x, PM, PM₁₀, or SO_x. Therefore, emissions of the aforementioned pollutants are less than or equal to permit action 002.

3.4 CAM

A CAM Plan was submitted and approved by the MPCA and is attached as part of the application. Provisions are included in this permit action 004. Attachment 3 to this TSD contains the Permittee CAM Plan.

3.5 Periodic Monitoring

None of the periodic monitoring in permit action 002 has been affected by this permit action 004.

3.6 Insignificant Activities

None of the insignificant activities in permit action 002 has been affected by this permit action 004.

3.7 Permit Organization

In general, the permit meets the MPCA Delta Guidance for ordering and grouping of requirements. One area where this permit deviates slightly from Delta guidance is in the use of appendices. While appendices are fully enforceable parts of the permit, in general, any requirement that the MPCA thinks should be tracked (e.g., limits, submittals, etc.), should be in Table A or B. The main reason is that the appendices are word processing sections and are not part of the tracking system. Violation of the appendices can be enforced, but the computer system will not automatically generate the necessary enforcement notices or documents. Staff must generate these.

3.8 Comments Received

This section will be completed after the review period.

Public Notice Period: 08/21/07 – 09/20/07

EPA 45-day Review Period: 08/21/07 – 10/05/07

No comments were received during the public notice and review periods. Permit action 004 authorizes a modification where limits were taken to avoid NSR. Under Minn. R. 7007.0750 subp. 7, construction and operation of EU005 may commence as of the date the permit was signed.

4. Conclusion

Based on the information provided by Gary Hilliard, the MPCA has reasonable assurance that the operation of the emission facility, as described in the Air Emission Permit No. 12300718-004 and this technical support document, will not cause or contribute to a violation of applicable federal regulations and Minnesota Rules.

Staff Members on Permit Team: Jared LaFave (permit writer/engineer)
 Scott Parr (enforcement)
 Curtis Stock (stack testing)
 Peggy Bartz (peer reviewer)

AQ File No. 2779B; DQ 1381; DQ 1505

Attachments: 1. Notice of Compliance letter
 2. Calculation Spreadsheet
 3. Permittee CAM Plan
 4. Facility Description and CD-01 Forms