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Facility Name: **Greif Bros Corp**

Application Number: **06-5620**

Date: **September 22, 1999**

#### **GENERAL PERMIT CONDITIONS**

#### **TERMINATION OF PERMIT TO INSTALL**

Substantial construction for installation must take place within 18 months of the effective date of this permit. 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.

#### **NOTICE OF INSPECTION**

The Director of the Ohio Environmental Protection Agency, or his authorized representatives, may enter upon the premises of the above-named applicant during construction and operation at any reasonable time for the purpose of making inspections, conducting tests, or to examine records or reports pertaining to the construction, modification or installation of the source(s) of environmental pollutants identified within this permit.

#### **CONSTRUCTION OF NEW SOURCES**

The proposed source(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 are inadequate or cannot meet applicable standards.

If the construction of the proposed source(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 Ohio Administrative Code (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

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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 applicable standards.

### **PERMIT TO INSTALL FEE**

In accordance with Ohio Revised Code 3745.11, the specified Permit to Install fee must be remitted within 30 days of the effective date of this permit to install.

### **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.

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### **APPLICABILITY**

This Permit to Install is applicable only to the contaminant sources identified. Separate application must be made to the Director for the installation or modification of any other contaminant sources.

### **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.

### **PERMIT TO OPERATE APPLICATION**

A Permit to Operate application must be submitted to the appropriate field office for each air contaminant source in this Permit to Install. In accordance with OAC Rule 3745-35-02, the application shall be filed no later than thirty days after commencement of operation.

### **SOURCE OPERATION AFTER COMPLETION OF CONSTRUCTION**

This facility is permitted to operate each source described by this permit to install for a period of up to one year from the date the source commenced operation. This permission to operate is granted only if the facility complies with all requirements contained in this permit and all applicable air pollution laws and regulations.

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<u>Ohio EPA Source Number</u>	<u>Source Identification Number</u>	<u>BAT Determination</u>	<u>Applicable Federal &amp; OAC Rules</u>	<u>Permit Allowable Mass Emissions and/or Control/Usage Requirements</u>
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**AIR EMISSION SUMMARY**

The air contaminant emissions units listed below comprise the Permit to Install for **Greif Bros Corp** located in **Noble** County. The emissions units listed below shall not exceed the emission limits/control requirements contained in the table. This condition in no way limits the applicability of any other state or federal regulations. Additionally, this condition does not limit the applicability of additional special terms and conditions of this permit.

Ohio  
EPA  
Source  
Number K001  
Cont'd  
K001

K001  
Cont'd

K002

K002  
Cont'd

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K003	K003 Cont'd	Source Identification <u>Description</u>		Line #2 - Exterior steel drums > 20" diameter.
		Drum Coating Line #1 - Interior/Exterior steel drums <22.5"		

Drum Coating

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Drum  
Coating  
Line #3

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		<p style="text-align: center;"><u>BAT Determination</u></p>		
		<p>Use of coatings proposed in the permit application or approved per Additional Special Term and Condition A.2.</p>	<p>Use of coatings proposed in the permit application or approved per Additional Special Term and Condition A.2.</p>	
		<p>Compliance with the air toxics policy.</p>	<p>Compliance with the air toxics policy.</p>	
		<p>Use of filters on booth exhaust.</p>	<p>Use of filters on booth exhaust.</p>	

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booth  
exhaust.

Use of  
coating  
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propose  
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the  
permit  
applica  
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approve  
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Additio  
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Special  
Term  
and  
Condi  
tion A.2.

Complia  
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with  
the air  
toxics  
policy.

Use of  
filters  
on

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<u>Ohio EPA Source Number</u>	<u>Source Identification Number</u>	<u>BAT Determination</u>	<u>Applicable Federal &amp; OAC Rules</u>	<u>Permit Allowable Mass Emissions and/or Control/Usage Requirements</u>
			3745-31-05 (A) (3)	3745-31-05 (D)
	Applicable Federal & <u>OAC Rules</u>			
	3745-31-05 (A) (3)	3745-31-05 (D)		
				3745-17-11
		3745-17-11		3745-17-07 (A)
				3745-21-09 (U)
		3745-17-07 (A)		
		3745-21-09 (U)		3745-31-05 (A) (3)

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<u>Ohio EPA Source Number</u>	<u>Source Identification Number</u>	<u>BAT Determination</u>	<u>Applicable Federal &amp; OAC Rules</u>	<u>Permit Allowable Mass Emissions and/or Control/Usage Requirements</u>
		Permit Allowable Mass Emissions and/or Control/Usage Requirements	shall not exceed 152 tons of VOC per year nor 53 tons of all hazardous air pollutants (HAP's) as a rolling twelve month total.	particulate emissions shall not exceed 20% opacity, as a 6-minute average, except as provided by rule. Maximum emissions of particulate matter shall not exceed 2.41 TPY. The VOC content of coatings employed shall not exceed the following: 4.3 lbs/gallon excluding water, for interior coating of drums, and 3.5 lbs/gallon, excluding water, for exterior coatings of drums. See Additional Special Term and Condition A.
	3745-17-11	VOC emissions shall be limited to 87.5 lbs/hr and 152 TPY including cleanup. Visible particulate emissions shall not exceed 20% opacity, as a 6-minute average, except as provided by rule. Maximum emissions of particulate matter shall not exceed 2.41 TPY.	Maximum emissions of particulate matter shall not exceed 0.551 pounds per hour.	
	3745-17-07 (A)	The VOC content of coatings employed shall not exceed the following: 4.3 lbs/gallon excluding water, for interior coating of drums, and 3.5 lbs/gallon, excluding water, for exterior coatings of drums.	VE limit equivalent to OAC 3745-31-05 (A) (3 )	
	3745-21-09 (U)		VOC content limit equivalent to OAC 3745-31-05 (A) (3 )	
3745-31-05 (D)		See Additional Special Term and Condition A.	VOC emissions shall be limited to 58.22 lbs/hr and 152 TPY including cleanup. Visible	

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of VOC per year nor 53 tons of all hazardous air pollutants as a rolling twelve month total. Maximum emissions of particulate matter shall not exceed 0.551 pounds per hour. VE limit equivalent to OAC 3745-31-05(A) (3)	limit equivalent to OAC 3745-31-05(A) (3)	coating of drums, and 3.5 lbs/gallon, excluding water, for exterior coatings of drums.		
Maximum emissions of particulate matter shall not exceed 0.551 pounds per hour. VE limit equivalent to OAC 3745-31-05(A) (3)	VOC emissions shall be limited to 10.45 lbs/hr and 45.77 TPY including cleanup. Visible particulate emissions shall not exceed 20% opacity, as a 6-minute average, except as provided by rule. Maximum emissions of particulate matter shall not exceed 2.41 TPY. The VOC content of coatings employed shall not exceed the following: 4.3 lbs/gallon excluding water, for interior	Combined emissions from emissions units K001, K002, and K003 shall not exceed 152 tons of VOC per year nor 53 tons of all hazardous air pollutants (HAP's) as a rolling twelve month total. See Additional Special Term and Condition A. Maximum emissions of particulate matter shall not exceed 0.551 pounds per hour. VE limit equivalent to OAC 3745-31-05(A) (3)		

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SUMMARY  
TOTAL PERMIT TO INSTALL ALLOWABLE EMISSIONS

<u>Pollutant</u>	<u>Tons/Year</u>
VOC	152
Total HAP's	53
Particulate	7.24

**CONSTRUCTION STATUS**

The **Ohio EPA, Southeast District Office** shall be notified in writing as to (a) the construction starting date, (b) the construction completion date, and (c) the date the facilities were placed into operation for the following sources: **K001, K002, and K003.**

**RECORD(S) RETENTION AND AVAILABILITY**

All records required by this Permit to Install shall be retained on file for a period of not less than three years unless otherwise indicated by Ohio Environmental Protection Agency. All records shall be made available to the Director, or any representative of the Director, for review during normal business hours.

**REPORTING REQUIREMENTS**

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Unless otherwise specified, reports required by the Permit to Install need only be submitted to **Ohio EPA, Southeast District Office, 2195 Front Street, Logan, OH 43138.**

#### **MAINTENANCE OF EQUIPMENT**

This source and its associated air pollution control system(s) shall be maintained regularly in accordance with good engineering practices and the recommendations of the respective manufacturers in order to minimize air contaminant emissions.

#### **MALFUNCTION/ABATEMENT**

In accordance with OAC RULE 3745-15-06, any malfunction of the source(s) or associated air pollution control system(s) shall be reported immediately to the **Ohio EPA, Southeast District Office, 2195 Front Street, Logan, OH 43138.**

Except as provided by OAC Rule 3745-15-06(A)(3), scheduled maintenance of air pollution control equipment that requires the shutdown or bypassing of air pollution control system(s) must be accompanied by the shutdown of the associated air pollution sources.

#### **CONSTRUCTION COMPLIANCE CERTIFICATION**

The applicant shall provide Ohio EPA with a written certification (see enclosed form) 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.

#### **ADDITIONAL SPECIAL TERMS AND CONDITIONS**

##### **A. Air Toxics Requirements**

1. This permit allows the use of the coatings and cleanup materials specified by the permittee in the application for PTI number 06-5620. In conjunction with the best available technology requirements of OAC rule 3745-31-05, the VOC emission limitations specified in this permit for combined

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emissions units K001, K002, and K003 were established in accordance with the Ohio EPA's "Air Toxics Policy" and are based on both the coating and cleanup material formulation data and the design parameters of the emissions units' exhaust system, as specified in the application. Compliance with the Ohio EPA's "Air Toxics Policy" was demonstrated for each pollutant based on the SCREEN3 model and a comparison of the predicted 1 hour maximum ground-level concentration to the MAGLC. The following summarizes the results of the modeling for each pollutant:

**Pollutant: MIBK**

**TLV (ug/m3): 205,000**

**Maximum Hourly Emission Rate (pounds/hour): 16.62**

**Predicted 1 Hour Maximum Ground-Level Concentration at the Fenceline (ug/m3): 347.8**

**Maximum Acceptable Ground-Level Concentration (MAGLC) (ug/m3): 4880**

**Pollutant: Xylene**

**TLV (ug/m3): 434,000**

**Maximum Hourly Emission Rate (pounds/hour): 14.28**

**Predicted 1 Hour Maximum Ground-Level Concentration at the Fenceline (ug/m3): 298.8**

**Maximum Acceptable Ground-Level Concentration (MAGLC) (ug/m3): 10,333**

**Pollutant: Ethylene Glycol**

**TLV (ug/m3): 129,680**

**Maximum Hourly Emission Rate (pounds/hour): 2.21**

**Predicted 1 Hour Maximum Ground-Level Concentration at the Fenceline (ug/m3): 46.15**

**Maximum Acceptable Ground-Level Concentration (MAGLC) (ug/m3): 3,088**

**Pollutant: Ethylbenzene**

**TLV (ug/m3): 434,000**

**Maximum Hourly Emission Rate (pounds/hour): 3.09**

**Predicted 1 Hour Maximum Ground-Level Concentration at the Fenceline (ug/m3): 64.7**

**Maximum Acceptable Ground-Level Concentration (MAGLC) (ug/m3): 10,333**

**Pollutant: Glycol Ether**

**TLV (ug/m3): 123,410**

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**Maximum Hourly Emission Rate (pounds/hour): 37.79**  
**Predicted 1 Hour Maximum Ground-Level Concentration at**  
**the Fenceline (ug/m3): 1,671.4**  
**Maximum Acceptable Ground-Level Concentration**  
**(MAGLC) (ug/m3): 2,938**

2. As long as the application of the "Air Toxics Policy" continues to show compliance with the applicable MAGLC, the permittee may implement any of the following changes with prior notification to and approval from the Ohio EPA Southeast District Office:

- a. any changes in the composition of the coatings or solvents, or the use of new coatings or solvents, that would result in the emission of a compound with a lower Threshold Limit Value (TLV), as indicated in the most recent version of the handbook entitled "American Conference of Governmental Industrial Hygienists (ACGIH)," than the lowest TLV value specified in the above table;
- b. any change to the emissions unit or its exhaust parameters (e.g., increased emission rate, reduction of exhaust gas flow rate, and decreased stack height);
- c. any change in the composition of the coatings or cleanup materials, or use of new coatings or cleanup materials, that would result in the emission of any of the exempted organic compounds included in the definition of "VOC" [OAC rule 3745-21-01(B)(6)];
- d. any change in the composition of the coatings or cleanup materials, or use of new coatings or cleanup materials, that would result in an increase in emissions of any "Hazardous Air Pollutants" (HAPS) as defined in OAC rule 3745-77-01(V); and,
- e. for any change to the emissions unit or its method of operation that would either require an increase in the emission limitation(s) established by this permit or would otherwise be considered a "modification" as defined in OAC rule 3745-31-01,

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the permittee shall obtain a permit to install  
prior to the change.

**B. Operational Restrictions**

1. The total quantity of VOC's applied in K001, K002, and K003 shall not exceed 152 tons per rolling 12-month period.

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2. The total quantity of HAP's applied in K001, K002, and K003 shall not exceed 53 tons per rolling 12-month period.

3. The permittee shall comply with the rolling 12-month VOC and HAP limitations and monitoring and recordkeeping requirements immediately upon issuance of this permit, by use of data from the previous 12 months of operation.

**C. Monitoring and/or Recordkeeping Requirements**

1. The permittee shall collect and record the following information each month for K001, K002, & K003 combined:

- a. the name and identification number of each coating, thinner, or cleanup material;
- b. the VOC content of each coating (excluding water and exempt solvents), thinner, and cleanup material in pounds per gallon;
- c. the total HAP content of each coating, thinner, and cleanup material in pounds per gallon;
- d. the individual air toxics content (as identified above) of each coating, thinner, and cleanup material in pounds per gallon;
- e. the number of gallons of each coating, thinner, and cleanup material employed;
- f. the total VOC emissions (VOC applied) from all coatings, thinners, and cleanup materials employed {(b) times (e)}, in pounds or tons;
- g. the total HAP emissions (HAP applied) from all coatings, thinners, and cleanup materials employed {(c) times (e)}, in pounds or tons;
- h. the total emissions of each individual air toxic from all coatings, thinners, and cleanup materials employed {(d) times (e)}, in pounds or tons;

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i. the rolling, 12-month summation of the HAP material usage figures and of the data required in item g. above; and,

j. the rolling, 12-month summation of the VOC material usage figures and of the data required in item f. above.

**D. Reporting Requirements**

1. The permittee shall notify the Director (the appropriate Ohio EPA District Office or local air agency) in writing of any monthly record showing emissions in excess of the monthly VOC or rolling, 12-month HAP limitations above. The notification shall include a copy of such record and shall be sent to the Director (the appropriate Ohio EPA District Office or local air agency) within 30 days following the end of the calendar month.
2. The permittee shall also submit quarterly reports which include the following information:
  - a. the total VOC emissions from the coatings, thinners, and cleanup materials employed in K001, K002, and K003, in tons, for each month and each 12-month period;
  - b. the total HAP emissions from the coatings, thinners, and cleanup materials employed in K001, K002, and K003, in tons, for each month and each 12-month period; and,
  - c. these reports shall be submitted by January 31, April 30, July 31, and October 31 of each year and shall include information for each month during the previous calendar quarter;
3. The permittee shall also submit quarterly deviation (excursion) reports which identify all exceedances of the rolling 12-month VOC and HAP application limitations. These reports are due as specified above.

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**E. Testing Requirements**

1. Compliance with the emission limitations shall be determined in accordance with the following method(s):

Emission Limitation:

4.3 pounds VOC per gallon of coating, excluding water and exempt solvents for the interior coating of a steel pail or drum.

3.5 pounds VOC per gallon of coating, excluding water and exempt solvents for the exterior coating of a steel pail or drum.

Applicable Compliance Method:

Compliance shall be based upon the recordkeeping requirements specified in this permit. Formulation data or USEPA Method 24 shall be used to determine the VOC contents of the coatings.

Emission Limitation:

K001 - 87.5 lbs/hr and 152 TPY including cleanup.

K002 - 58.22 lbs/hr and 152 TPY including cleanup.

K003 - 10.45 lbs/hr and 45.77 TPY including cleanup.

Combined emission limitation of 152 TPY VOC's

Applicable Compliance Method:

Formulation data or USEPA Method 24 shall be used to determine the VOC contents of the coatings. Pounds per hour emissions are based upon the worst case hourly emissions rate, therefore, a one-time calculation of hourly emissions using worst case variables shall be used to determine hourly rate compliance. Annual compliance shall be based upon the record keeping requirements specified in this permit.

Emission Limitation:

0.551 lb/hr PM and 2.41 TPY per coating line.

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Applicable Compliance Method:

Compliance shall be based on this equation,  $0.551 \text{ lb/hr PM} \times 4.38 = 2.41 \text{ TPY}$ , and upon the material usage, transfer efficiency and control efficiency.

2. Compliance with the annual emission limitation of 152 tons of VOC's, 53 tons of total combined HAP's shall be based on a 12-month rolling average.

3. Compliance with the visible emission limit shall be determined through visible emission observations performed in accordance with 40 CFR Part 60, Appendix A, Method 9 and the procedures specified in OAC rule 3745-17-03(B)(1). No visible emission testing is specifically required to demonstrate compliance with this limit but, if appropriate, may be requested pursuant to OAC rule 3745-15-04(A).