

217/782-2113

FEDERALLY ENFORCEABLE STATE OPERATING PERMIT - SPECIAL -- "REVISED"

PERMITTEE

Fedders Corporation  
Attn: Derick Reedy  
415 Wabash Avenue  
Effingham, Illinois 62401

<u>Application No.:</u> 91090054	<u>I.D. No.:</u> 049025AAU
<u>Applicant's Designation:</u>	<u>Date Received:</u> March 20, 2002
<u>Subject:</u> Six Fin Presses	
<u>Date Issued:</u> March 26, 2002	<u>Expiration Date:</u> September 24, 2004
<u>Source Location:</u> 415 Wabash Avenue, Effingham	

This permit is hereby granted to the above-designated Permittee to OPERATE emission source(s) and/or air pollution control equipment consisting of six (6) fin presses, pursuant to the above-referenced application. This permit is subject to standard conditions attached hereto and the following special condition(s):

- 1a. This federally enforceable state operating permit is issued to limit the total emissions of volatile organic material (VOM) from the fin presses and other VOM emission units at the above referenced plant including the electrodeposition coating line, open top batch vapor degreaser, fin presses, and gluing operation to less than PSD major source thresholds (i.e., less than 250 tons per year) pursuant to 40 CFR 52.21 - "Prevention Of Significant Deterioration of Air Quality," (PSD). As a result, the source is not a major source for purposes of PSD. The maximum emissions of this source, as limited by the conditions of this permit are described in Attachment A.
- b. This permit supersedes the VOM emission limitations for the operating permit(s) covering the emission units listed on Attachment B.
- c. Prior to issuance, a draft of this permit has undergone a public notice and comment period.
2. Pursuant to 35 Ill. Adm. Code 215.301, organic material emissions from the fin presses shall not exceed 8 pounds per hour, if the organic material qualifies as photochemically reactive organic material as defined in 35 Ill. Adm. Code 211.4690.
3. This permit is issued based upon the fin presses being exempt from the requirements of 40 CFR Part 60; Subpart SS - "Standards of Performance for Industrial Surface Coating Large Appliances."
- 4a. Operation and emissions of the VOM emission units at the plant shall not exceed the following limits. Compliance with annual limits shall be determined on a monthly basis from the sum of the data for the current month plus the preceding 11 months.

Emission Unit	VOM Content (Lb/Gal)	Usage Gallons*		VOM Emissions Tons	
		(Per Mo)	(Per Yr)	(Per Mo)	(Per Yr)
** E-Coat Coat Painting					
- Paste	2.25	4,000	27,555.6	3.84	31.00
- Resin	2.10	12,000	73,913	3.66	17.00
- 2 Ethyl Hexanol	6.94	400	1,729.1	1.39	6.00
Repair Coating (Powder)	0.04 Lb/Lb	2,083 Lb	25,000 Lb	0.04	0.5
Model Shop Coating	6.02	5	33.2	0.02	0.1
Fin Press Lubricant	5.93	7,500	51,736.9	22.24	153.40
Wire Coders					
- Ink	6.536	30	229.5	0.10	0.75
- Cleaner	6.703	15	74.6	0.50	0.25
- Extender	6.57	15	76.1	0.05	0.25
Glue Line	0.017	600	7,200	0.01	0.10
Auto Brazing	7.12	150	1,404	0.53	5.0
Silk-Screening					
- Ink	3.00	1	10	0.01	0.02
- Catalyst	4.38	1	5	0.01	0.02
- Retardant	7.97	1	5	0.01	0.02
- Thinner	7.52	1	5	0.01	0.02
- RC5 Cleaner	4.60	1	20	0.01	0.02
Totals				32.43	214.45

These limits define the potential emissions of the emission units and are based on the actual emissions determined from maximum material usage and VOM contents provided in the application and mass balance calculations. \*Excluding water and exempt compounds.

- b. This permit is issued based upon negligible emissions of volatile organic material and particulate matter from power paint touch-up booth with collector filters. For this purpose emissions from each piece of equipment shall not exceed nominal rates of 0.1 pound per hour and 0.44 ton per year.
  - c. Total VOM emissions from emission units at the plant not addressed above shall not exceed 2.0 tons per year.
- 5a. The Permittee is required to keep the follow records:
- i. VOM Content Records:
    - A. A record of the VOM content of each coating, solvent, ink, cleaner, adhesive, lubricant, or other VOM containing raw

material. The record must be kept current, and include the following for each material: the weight of VOM content per volume (lb/gal); the determination method; and the underlying documentation.

ii. Operating Records:

- A. Name and identification number of each coating as applied, solvent, ink, cleaner, adhesive, lubricant, or other VOM containing raw material used at the plant;
- B. A determination as to whether the fin press lubricant is a photochemically reactive material, as defined in 35 Ill. Adm. Code 211.4690. The record must be kept current, and include a record of the chemical constituents of the lubricant as identified through manufacturer's data or sampling and analysis by appropriate methods formally adopted by USEPA and a copy of the underlying documentation (i.e., MSDS, chemical analysis, etc.); and

iii. Monthly Records:

- A. Name and identification number of each coating as applied, solvent, ink, cleaner, adhesive, lubricant, or other VOM containing raw material used at the source;
- B. The weight of VOM per volume (lb/gal) of each coating, solvent, ink, cleaner, adhesive, lubricant, or other VOM containing raw material (minus water and any compounds which are specifically exempted from the definition of VOM) as applied on each coating line, the vapor degreaser, fin presses, wire coater, and gluing operation;
- C. Monthly usage and emissions for each coating, solvent, ink, cleaner, adhesive, lubricant, or other VOM containing raw material; and
- D. Annual plant VOM emissions, determined on a monthly basis, with supporting calculations.

iv. Annual Records:

- A. An evaluation of the maximum annual VOM emissions from miscellaneous emission units at the plant, in total, as addressed by Condition 4(b), the evaluation may rely on the fact that maximum operation will not occur simultaneously for all units, with supporting calculations and documentation.

- b. All records and logs required by this permit shall be retained at a readily accessible location at the source for at least three years from the date of entry and shall be made available for inspection and copying by the Illinois EPA or USEPA upon request. Any records retained

in an electronic format (e.g., computer) shall be capable of being retrieved and printed on paper during normal source office hours so as to be able to respond to an Illinois EPA or USEPA request for records during the course of a source inspection.

6. If there is an exceedance of the requirements of this permit as determined by the records required by this permit, the Permittee shall submit a report to the Illinois EPA's Compliance Section in Springfield, Illinois within 30 days after the exceedance. The report shall include the emissions released in accordance with the recordkeeping requirements, a copy of the relevant records, and a description of the exceedances or violation and efforts to reduce emissions and future occurrences.
7. Compliance with the limitations in Condition 4 shall be determined as follows:
  - a. Annual Usage: Compute the volume of each material (i.e., coating, lubricant, adhesives, etc.) used each month by the 15th of the following month. By the 15th of each month, add the latest monthly material usage used for the month to the monthly usage for the 11 previous months (to obtain the annual usage of each material).
  - b. Annual Emissions: Annual uncontrolled emissions shall be determined as the sum of an emission unit's monthly emission rate over a consecutive 12 month period. Compute the emissions of each material (i.e., coating, lubricant, adhesives, etc.) used each month by the 15th of the following month. To obtain the annual emissions of each material, by the 15th of each month, add the latest monthly material emissions for the month to the emissions of the 11 previous months.
  - c. Volatile Organic Material (VOM) Content: VOM content of the coatings, lubricants, adhesives, inks, and solvents shall be determined in accordance with the provisions of 35 Ill. Adm. Code Section 215.102 and 215.208, manufacturer's data or sampling and analysis by appropriate methods formally adopted by USEPA. For coatings or lubricant, in the event of a difference between manufacturer's data and laboratory analysis, the results of the laboratory analysis shall govern. For solvents, VOM and organic material shall be determined by manufacturer's data.

The above limitation excludes water and any compounds which are specifically exempted from the definition of VOM pursuant to 35 Ill. Adm. Code Section 215, Subpart F.
  - d. VOM Emissions: Monthly emissions shall be calculated based upon the quantity of VOM present in the material used (lb VOM per gallon) and the quantity of material used for the month of record:

$$E_{VOM} = \text{Usage} \times \text{VOM Content}$$

Where:

$E_{VOM}$ : Monthly VOM emission rate  
Usage: Monthly usage rate (gallon per month).

VOM Content: The maximum quantity of VOM present in the material (lb VOM per gallon) pursuant to Condition 5a(i)(1) and 7(d).

8. Within 30 days of a written request from the Illinois EPA the VOM content of the materials used at the facility shall be determined through the methods referenced in Condition 7(c). Three (3) copies of the Final Report(s) for these tests shall be submitted to the Illinois EPA within 14 days after the test results are compiled and finalized.
- 9a. The Permittee shall submit the following additional information with the Annual Emissions Report, due May 1st of each year.
  - i. Maximum VOM content (lb/gal) of each coating, solvent, ink, cleaner, adhesive, and any other material containing VOM as applied used during the year, excluding water and exempt materials;
  - ii. Each month's, monthly and annual material usage's for the preceding calendar year (i.e., preceding 12 months);
  - iii. Each month's, annual plant VOM emissions for the preceding calendar year (i.e., preceding 12 months);
  - iv. Annual plant VOM emissions; and
  - v. Dates that the plant exceeded the annual usage or VOM limitations, if any.

If there have been no exceedances during the prior calendar year the Annual Emissions Report shall include a statement to that effect.

- b. Two copies of required reports and notifications shall be sent to:

Illinois Environmental Protection Agency  
Bureau of Air  
Compliance Section (#40)  
P.O. Box 19276  
Springfield, Illinois 62794-9276

It should be noted that this permit has been revised to increase the VOM content limits for the E-Coat process (paste) to 2.25 lb/gallon and decrease the usage of paste to 27,555.6 gallons without any change in the overall emissions of VOM from the source.

Page 6

If you have any questions on this permit, please call Mohamed Anane at 217/782-2113.

Donald E. Sutton, P. E.  
Manager, Permit Section  
Division of Air Pollution Control

DES:MA:jar

cc: Illinois EPA, FOS Region 3  
Illinois EPA, Compliance Section  
USEPA  
James O'Donnell, DLC

Fedders North America, Inc.  
 I.D. No.: 049025AAU  
 Application No.: 91090054  
 Date Issued: January 31, 2001

ATTACHMENT A

1a.

<u>Emission Unit</u>	<u>VOM Content (Lb/Gal)</u>	<u>Usage Gallons*</u>		<u>VOM Emissions Tons</u>	
		<u>(Per Mo)</u>	<u>(Per Yr)</u>	<u>(Per Mo)</u>	<u>(Per Yr)</u>
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b. Total VOM emissions from emission units at the plant not addressed above shall not exceed 2.0 tons per year.

This attachment provides a summary of the maximum emission from the plant operating in compliance with the requirements of this federally enforceable permit. In preparing this summary, the Illinois EPA used the annual operating scenario which results in maximum emissions from the plant. This includes the maximum usage rate and VOM content for each material used at the

plant. The resulting maximum emissions are well below the levels, e.g., 250 tons per year, at which this source would be considered a major source for purposes of 40 CFR 52.21 - "Prevention Of Significant Deterioration Of Air Quality." Actual emissions from this source will be less than predicted in this summary to the extent that less material is handled and control measures are more effective than required in this permit.

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Fedders North America, Inc.  
I.D. No.: 049025AAU  
Application No.: 91090054  
Date Issued: January 31, 2001

ATTACHMENT B

<b>EIS No.</b>	<b>Equipment</b>	<b>Application No.</b>
0003	Glue Operation (Exempt Solvent)	73021535
0006	Brazing and Soldering	73021539
0009	Open Top Vapor Degreaser-BB MDL HL-900 (Primary Degreasing Solvent Trichloroethylene)	78020008
0011	Paint Dip Tank and Bake Oven	88070057
0012	Touch-Up Spray Paint Booth With Filter	88070057
0013	Die Cleaning System Including an Oil/Water Separator	89110071
0014	2 Aluminum Coil Fin Presses (Sources Installed 1986, Evaporative Lubricating Oil)	91090054
0015	2 Aluminum Metal Coil Fin Presses Installed 1970 & 1971, Evaporative Lubricant Oil- VOM	91090054
0016	Two Fin Presses (Air Conditioning Cooling Fins) Evaporative Lubricant	91090054
0018	Model Shop Paint Booth (Negligible Emissions)	88070057
0033	Powder Coat Booth (Repair Coat)	91090054

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