

VIA CERTIFIED MAIL

Mr. Leonard R. Parker  
Brinly - Hardy Company  
P.O. Box 1116  
Louisville, IN 40201

Re: 019-11049  
Second Notice Only Change to CP 019-10477,  
Plt ID 019-00098

Dear Mr. Parker:

Brinly - Hardy Company was issued a permit on April 20, 1999 for the construction and operation of a lawn and garden equipment manufacturing operation. A letter was received on June 15, 1999 requesting the construction and operation of an addition consisting of the following equipment:

- (a) Two (2) offset printing presses identified as 1850 and 1250, each with a maximum rate of rubber-base plus offset ink of 1.49 pounds per hour, unprinted paper of 159.71 and 79.85 pounds per hour, other liquids of 0.26 and 0.08 pounds per hour, with a maximum line speed of 24,888 and 12,444 feet per minute, a maximum print width of 17 and 8.5 inches, respectively, and exhausting through one (1) stack, identified as ID # 21,
- (b) two (2) manual MIG welding stations with a maximum capacity of 26.6 pounds of welding wire per hour, fugitively within the building,
- (c) two (2) manual MIG welders utilized for research and development and are not production related equipment,
- (d) two (2) stick welders utilized in various areas of the plant for maintenance and tool die and are not production related equipment,
- (e) two (2) manual oxyacetylene cutting torches utilized for maintenance and tool die and are not production related equipment,
- (f) One (1) plow grinding and polishing operation, utilizing a dust collector for particulate matter control, and exhausting inside the building,
- (g) Two (2) furnaces each with a rated heat input of 0.115 mmBtu (0.230 mmBtu total), identified as S-13 and S-18,
- (h) Two (2) furnaces each with a rated heat input of 0.110 mmBtu (0.220 mmBtu total), identified as S-14 and S-15,
- (i) Three (3) furnaces each with a rated heat input of 0.110 mmBtu (0.330 mmBtu total), identified as S-16, S-17 and S-20,
- (j) One (1) furnace with a rated heat input of 0.069 mmBtu, identified as S-19, and
- (k) One (1) furnace with a rated heat input of 1.85 mmBtu, identified as 1080.

### Potential To Emit for the New Facilities

Pursuant to 326 IAC 2-1.1-1(16), Potential to Emit is defined as “the maximum capacity of a stationary source or emissions unit to emit any air pollutant under its physical and operational design. Any physical or operational limitation on the capacity of a source to emit an air pollutant, including air pollution control equipment and restrictions on hours of operation or type or amount of material combusted, stored, or processed shall be treated as part of its design if the limitation is enforceable by the U. S. EPA, the department, or the appropriate local air pollution control agency.”

Pollutant	Potential To Emit (tons/year)
PM	0.61
PM-10	0.61
SO <sub>2</sub>	0.01
VOC	1.07
CO	0.99
NOx	1.18

HAP's	Potential To Emit (tons/year)
Magnesium	0.03
TOTAL	0.03

- (a) The potential to emit (as defined in 326 IAC 2-7-1(29)) for the new facilities of all criteria pollutants are less than 5 tons per year for particulate matter, 10 tons per year for sulfur dioxide, nitrogen oxides, volatile organic compounds, and 25 tons per year for carbon monoxide. Therefore, the source is subject to the provisions of 326 IAC 2-6.1-6(d).
- (b) Fugitive Emissions  
Since this type of operation is not one of the twenty-eight (28) listed source categories under 326 IAC 2-2 and since there are no applicable New Source Performance Standards that were in effect on August 7, 1980, the fugitive particulate matter (PM) and volatile organic compound (VOC) emissions are not counted toward determination of PSD and Emission Offset applicability.

### Federal Rule Applicability

- (a) The two (2) offset printing presses identified as 1850 and 1250 are not subject to the requirements of the New Source Performance Standard, 326 IAC 12, (40 CFR 60.430, Subpart QQ). The printing presses are not rotogravure printers.
- (b) The two (2) offset printing presses identified as 1850 and 1250 are not subject to the requirements of the National Emission Standards for Hazardous Air Pollutants (NESHAPs), (40 CFR 63.820, Subpart KK). The source is not a major source for HAPs and the printing presses are not rotogravure or flexographic.

### State Rule Applicability - Entire Source

The two (2) offset printing presses identified as 1850 and 1250 are not subject to 326 IAC 8-5-5 (Graphic Arts Operation). This section applies to packaging rotogravure, publication rotogravure, and flexographic printing sources, that were constructed after November 1, 1980 and are located anywhere in the state, with potential emissions of twenty-five (25) tons per year or more of volatile organic compounds. The two (2) offset printing presses identified as 1850 and 1250 have potential emissions of VOC of less than twenty-five (25) tons per year, therefore, are not subject to 326 IAC 8-5-5 (Graphic Arts Operation).

Pursuant to the provisions of 326 IAC 2-6.1-6 the permit is hereby revised as follows:

- (b) On page 2 of 13, the following units have been added (changes in **bold** and ~~strikeout~~):
  - (o) **Two (2) offset printing presses identified as 1850 and 1250, each with a maximum rate of rubber-base plus offset ink of 1.49 pounds per hour, unprinted paper of 159.71 and 79.85 pounds per hour, other liquids of 0.26 and 0.08 pounds per hour, with a maximum line speed of 24,888 and 12,444 feet per minute, a maximum print width of 17 and 8.5 inches, respectively, and exhausting through one (1) stack, identified as ID # 21,**
  - (p) **two (2) manual MIG welding stations with a maximum capacity of 26.6 pounds of welding wire per hour, fugitively within the building,**
  - (q) **two (2) manual MIG welders utilized for research and development and are not production related equipment,**
  - (r) **two (2) stick welders utilized in various areas of the plant for maintenance and tool die and are not production related equipment,**
  - (s) **two (2) manual oxyacetylene cutting torches utilized for maintenance and tool die and are not production related equipment,**
  - (t) **One (1) plow grinding and polishing operation, utilizing a dust collector for particulate matter control, and venting fugitively to the atmosphere,**
  - (u) **Two (2) furnaces each with a rated heat input of 0.115 mmBtu (0.230 mmBtu total), identified as S-13 and S-18,**
  - (v) **Two (2) furnaces each with a rated heat input of 0.110 mmBtu (0.220 mmBtu total), identified as S-14 and S-15,**
  - (w) **Three (3) furnaces each with a rated heat input of 0.110 mmBtu (0.330 mmBtu total), identified as S-16, S-17 and S-20,**
  - (x) **One (1) furnace with a rated heat input of 0.069 mmBtu, identified as S-19, and**
  - (y) **One (1) furnace with a rated heat input of 1.85 mmBtu, identified as 1080.**

All other conditions of the permit shall remain unchanged and in effect. Please attach a copy of this amendment with the original permit.

This decision is subject to the Indiana Administrative Orders and Procedures Act - IC 4-21.5-3-5. If you have any questions on this matter, please contact Phillip Ritz, c/o OAM, 100 North Senate Avenue, P.O. Box 6015, Indianapolis, Indiana, 46206-6015, call (800) 451-6027, press 0 and ask for Duane Van Laningham or extension 3-6878, or dial (973) 575-2555 extension 3241.

Sincerely,

Paul Dubenetzky, Chief  
Permits Branch  
Office of Air Management

PR/EVP

cc: File - Clark County  
Clark County Health Department  
Air Compliance Section Inspector - Joe Foyst  
Compliance Data Section - Karen Nowak  
Permit Tracking - Janet Mobley  
Air Programs Section - Michele Boner

**CONSTRUCTION PERMIT  
OFFICE OF AIR MANAGEMENT**

**Brinly - Hardy Company  
3230 Industrial Parkway  
Jeffersonville, IN, 47130**

is hereby authorized to construct

the equipment listed in the Page 2 of this permit.

This permit is issued to the above mentioned company (herein known as the Permittee) under the provisions of 326 IAC 2-1 and 40 CFR 52.780, with conditions listed on the attached pages.

Construction Permit No.: CP-019-10477-00098	
Issued by: Paul Dubenetzky, Branch Chief Office of Air Management	Issuance Date: April 20, 1999
First Notice-only Change: 019-10965	Pages Affected: 2
Issued by: Paul Dubenetzky, Branch Chief Office of Air Management	Issuance Date: June 2, 1999
Second Notice-only Change: 019-11049	Pages Affected: 2a and 2b
Issued by: Paul Dubenetzky, Branch Chief Office of Air Management	Issuance Date:

- (a) One (1) powder coating application booth, identified as PC-A, coating a maximum of 20,000 pounds of metal parts per hour, utilizing electrostatic air atomized spray guns and a combination dry filter and cyclone as particulate control, exhausting within the building,
- (b) One (1) powder coating application booth, identified as PC-B, coating a maximum of 20,000 pounds of metal parts per hour, utilizing electrostatic air atomized spray guns and a combination dry filter and cyclone as particulate control, exhausting within the building,
- (c) one (1) six stage conveyerized wash system with a maximum throughput of 12.5 tons of metal parts per hour, exhausting at stacks 1 and 2,
- (d) six (6) robot MIG welding stations exhausting to stack 7 and consisting of:
  - (1) two (2) stations with a maximum capacity of 18.7 pounds of welding wire per hour,
  - (2) two (2) stations with a maximum capacity of 16 pounds of welding wire per hour,
  - (3) one (1) stations with a maximum capacity of 12.6 pounds of welding wire per hour, and
  - (4) one (1) stations with a maximum capacity of 26.6 pounds of welding wire per hour,
- (e) four (4) manual MIG welding stations with a maximum capacity of 26.6 pounds of welding wire per hour, exhausting at stacks 8 and 9,
- (f) One (1) tool and die bead blaster, identified as BB1, with a maximum capacity of 110 pounds of glass bead per hour, using a dust bag as particulate control, and exhausting within the building,
- (g) Three (3) metal grinders, identified as MG1-3, with a maximum capacity of 100 pounds of metal die parts per hour, using a centrifugal dust collector as particulate control, and exhausting within the building,
- (h) one (1) boiler, with a rated heat input of 6 million British thermal units (MMBtu) per hour, exhausting at stack 3,
- (i) one (1) drying oven, with a rated heat input of 2.5 MMBtu per hour, exhausting at stack 4,
- (j) one (1) curing oven, with a rated heat input of 5.5 MMBtu per hour, exhausting at stack 5 and 6,
- (k) One (1) controlled pyrolysis cleaning furnace, rated at 0.95 million British thermal units (MMBtu) per hour, utilizing one (1) direct flame afterburner, rated at 0.56 million MMBtu per hour as control and exhausting at stack 10,
- (l) One (1) heat treating furnace, identified as tool and die heat treating furnace, rated at 0.078 million British thermal units (mmBtu) per hour, exhausting at stack 11,
- (m) One (1) draw furnace, identified as tool and die draw furnace, rated at 0.18 million British thermal units (MMBtu) per hour, exhausting at stack 11,
- (n) One (1) furnace/air make up unit, identified as blue furnace, rated at 4.4 million British thermal units (MMBtu) per hour, exhausting at stack 12,
- (o) Two (2) offset printing presses identified as 1850 and 1250, each with a maximum rate of rubber-base plus offset ink of 1.49 pounds per hour, unprinted paper of 159.71 and 79.85 pounds per hour, other liquids of 0.26 and 0.08 pounds per hour, with a maximum line speed of 24,888 and 12,444 feet per minute, a maximum print width of 17 and 8.5 inches, respectively, and exhausting through one (1) stack, identified as ID # 21,
- (p) two (2) manual MIG welding stations with a maximum capacity of 26.6 pounds of welding wire per hour, fugitively within the building,
- (q) two (2) manual MIG welders utilized for research and development and are not production related equipment,
- (r) two (2) stick welders utilized in various areas of the plant for maintenance and tool die and are not production related equipment,

- (s) two (2) manual oxyacetylene cutting torches utilized for maintenance and tool die and are not production related equipment,
- (t) One (1) plow grinding and polishing operation, utilizing a dust collector for particulate matter control, and venting fugitively to the atmosphere,
- (u) Two (2) furnaces each with a rated heat input of 0.115 mmBtu (0.230 mmBtu total), identified as S-13 and S-18,
- (v) Two (2) furnaces each with a rated heat input of 0.110 mmBtu (0.220 mmBtu total), identified as S-14 and S-15,
- (w) Three (3) furnaces each with a rated heat input of 0.110 mmBtu (0.330 mmBtu total), identified as S-16, S-17 and S-20,
- (x) One (1) furnace with a rated heat input of 0.069 mmBtu, identified as S-19, and
- (y) One (1) furnace with a rated heat input of 1.85 mmBtu, identified as 1080.

**Appendix A: Emission Calculations**  
**Natural Gas Combustion**  
**MM Btu/hr 0.3 - < 100**

**Company Name: Brinly-Hardy Company**  
**Address City IN Zip: 3230 Industrial Parkway, Jeffersonville, Indiana, 47130**  
**CP: 019-11049**  
**Plt ID: 019-00098**  
**Reviewer: Phillip Ritz**  
**Date: June 1, 1999**

Heat Input Capacity                      Potential Throughput  
MMBtu/hr                                      MMCF/yr

2.7

23.6

Heat Input Capacity includes:

- Two (2) furnaces each with a rated heat input of 0.115 mmBtu (0.230 total), identified as S-13 and S-18
- Two (2) furnaces each with a rated heat input of 0.110 mmBtu (0.220 total), identified as S-14 and S-15
- Three (3) furnaces each with a rated heat input of 0.110 mmBtu (0.330 total), identified as S-16, S-17 and S-20
- One (1) furnace with a rated heat input of 0.069 mmBtu, identified as S-19
- One (1) furnace with a rated heat input of 1.85 mmBtu, identified as 1080

	Pollutant					
	PM	PM10	SO2	NOx	VOC	CO
Emission Factor in lb/MMCF	7.6	7.6	0.6	100.0	5.5	84.0
Potential Emission in tons/yr	0.09	0.09	0.01	1.18	0.07	0.99

Methodology:

MMBtu = 1,000,000 Btu

MMCF = 1,000,000 Cubic Feet of Gas

Emission Factors for NOx: uncontrolled = 100, Low Nox Burner = 50, Flue gas recirculation = 32

All PM is assumed to be less than 1.0 micrometer in diameter. Therefore, the PM emission factors may be used to estimate PM10, PM2.5, and PM1 em

Potential Throughput (MMCF) = Heat Input Capacity (MMBtu/hr) x 8,760 hrs/yr x 1 MMCF/1,000 MMBtu

Emission Factors from AP 42, Chapter 1.4, Tables 1.4-1 and 1.4-2, SCC #1-01-006-02, #1-02-006-02, #1-03-006-02, #1-03-006-03

Emission (tons/yr) = Throughput (MMCF/yr) x Emission Factor (lb/MMCF)/2,000 lb/ton



**Appendix A: Emissions Calculations  
VOC From Printing Press Operations**

**Company Name:** Brinly-Hardy Company  
**Address City IN Zip:** 3230 Industrial Parkway, Jeffersonville, Indiana, 47130  
**CP:** 019-11049  
**Plt ID:** 019-00098  
**Reviewer:** Phillip Ritz  
**Date:** June 1, 1999

THROUGHPUT			
Press I.D.	MAXIMUM LINE SPEED (FEET/MIN)	MAXIMUM PRINT WIDTH (INCHES)	MMin <sup>2</sup> /YEAR
1850	122	17	13,081

INK VOCS					
Ink Name Press Id	Maximum Coverage (lbs/MMin <sup>2</sup> )	Weight % Volatiles	Flash Off %	Throughput (MMin <sup>2</sup> /Year)	Emissions* (TONS/YEAR)
Rubber-Base Plus Offset Ink	1.00000	0%	80.00%	13081	0.00
Roller Wash	0.06250	85%	80.00%	13081	0.28
Quicksilver Fountain Solution	0.03125	68%	80.00%	13081	0.11
Allied Plate Fix	0.06250	96%	80.00%	13081	0.31
Economist Anti-Oxidant For Ink	0.01563	80%	80.00%	13081	0.07
		0%	0.00%	13081	0.00

Subtotal VOC Emissions =	<b>0.77 Ton/yr</b>
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THROUGHPUT			
Press I.D.	MAXIMUM LINE SPEED (FEET/MIN)	MAXIMUM PRINT WIDTH (INCHES)	MMin <sup>2</sup> /YEAR
1250	122	8.5	6,541

INK VOCS					
Ink Name Press Id	Maximum Coverage (lbs/MMin <sup>2</sup> )	Weight % Volatiles	Flash Off %	Throughput (MMin <sup>2</sup> /Year)	Emissions* (TONS/YEAR)
Rubber-Base Plus Offset Ink	0.50000	0%	80.00%	6541	0.00
Roller Wash	0.03125	85%	80.00%	6541	0.07
Quicksilver Fountain Solution	0.03125	68%	80.00%	6541	0.06
Allied Plate Fix	0.03125	96%	80.00%	6541	0.08
Economist Anti-Oxidant For Ink	0.01563	80%	80.00%	6541	0.03

Subtotal VOC Emissions =	<b>0.24 Ton/yr</b>
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<b>Total VOC Emissions =</b>	<b>1.00 Ton/yr</b>
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\*VOC (Tons/Year) = Maximum Coverage pounds per MMin<sup>2</sup> \* Weight % volatiles (weight % of water & organics - weight % of water = weight % organics) \* Flash off \* Throughput \* 1 Ton per 2000 pounds

**METHODOLOGY**

Throughput = Maxium line speed feet per minute \* Convert feet to inches \* Maximum print width inches \* 60 minutes per hour \* 8760 hours per year = MMin<sup>2</sup> per Year

VOC = Maximum Coverage pounds per MMin<sup>2</sup> \* Weight percentage volatiles (water minus organics) \* Flash off \* Throughput \* Tons per 2000 pounds = Tons per Year

NOTE: HEAT SET OFFSET PRINTING HAS AN ASSUMED FLASH OFF OF 80%. OTHER TYPES OF PRINTERS HAVE A FLASH OFF OF 100%.

(Source -OAQPS Draft Guidance, "Control of Volatile Organic Compound Emissions from Offset Lithographic Printing (9/93) )

## Appendix A: Emission Calculations

**Company Name:** Brinly-Hardy Company  
**Address City IN Zip:** 3230 Industrial Parkway, Jeffersonville, Indiana, 47130  
**CP:** 019-11049  
**Plt ID:** 019-00098  
**Reviewer:** Phillip Ritz  
**Date:** June 1, 1999

<b>Uncontrolled Potential Emissions (tons/year)</b>				
Emissions Generating Activity				
Pollutant	Natural Gas Combustion (ID S-13 thru S-20)	Printing Press Operations ID 1850 & 1250	Welding Emissions	<b>TOTAL</b>
PM	0.09	0.00	0.52	0.61
PM10	0.09	0.00	0.52	0.61
SO2	0.01	0.00	0.00	0.01
NOx	1.18	0.00	0.00	1.18
VOC	0.07	1.00	0.00	1.07
CO	0.99	0.00	0.00	0.99
total HAPs	0.00	0.00	0.03	0.03
worst case single HAP	0.00	0.00	0.03 (Magnesium)	0.03 (Magnesium)
Total emissions based on rated capacity at 8,760 hours/year.				
<b>Controlled Potential Emissions (tons/year)</b>				
Emissions Generating Activity				
Pollutant	Natural Gas Combustion (ID S-13 thru S-20)	Printing Press Operations ID 1850 & 1250	Welding Emissions	<b>TOTAL</b>
PM	0.09	0.00	0.52	0.61
PM10	0.09	0.00	0.52	0.61
SO2	0.01	0.00	0.00	0.01
NOx	1.18	0.00	0.00	1.18
VOC	0.07	1.00	0.00	1.07
CO	0.99	0.00	0.00	0.99
total HAPs	0.00	0.00	0.03	0.03
worst case single HAP	0.00	0.00	0.03 (Magnesium)	0.03 (Magnesium)
Total emissions based on rated capacity at 8,760 hours/year, after control.				

Appendix A: Welding and Thermal Cutting

Company Name: Brinly-Hardy Company  
 Address City IN Zip: 3230 Industrial Parkway, Jeffersonville, Indiana, 47130  
 CP: 019-11049  
 Plt ID: 019-00098  
 Reviewer: Phillip Ritz  
 Date: June 1, 1999

PROCESS	Number of Stations	Max. electrode consumption per station (lbs/hr)	EMISSION FACTORS * (lb pollutant / lb electrode)				EMISSIONS (lb/hr)				TOTAL HAPS (lb/hr)
			PM = PM10	Mn	Ni	Cr	PM = PM10	Mn	Ni	Cr	
WELDING											
Metal Inert Gas (MIG)(E70S-3)	1	11.3	0.004	0.0002			0.045	0.00226	0.000	0	0.002
Metal Inert Gas (MIG)(E70S-3)	1	18.6	0.004	0.0002			0.074	0.00372	0.000	0	0.004
EMISSION TOTALS							PM = PM10	Mn	Ni	Cr	Total HAPs
Potential Emissions lbs/hr							0.12	0.01	0.00	0.00	0.01
Potential Emissions lbs/day							2.87	0.14	0.00	0.00	0.14
Potential Emissions tons/year							0.52	0.03	0.00	0.00	0.03

METHODOLGY

\*Emission Factors are default values for carbon steel unless a specific electrode type is noted in the Process column. Consult AP-42 or other reference for different electrode types.

Welding emissions, lb/hr: (# of stations)(max. lbs of electrode used/hr/station)(emission factor, lb. pollutant/lb. of electrode used)

Cutting emissions, lb/hr: (# of stations)(max. metal thickness, in.)(max. cutting rate, in./min.)(60 min./hr.)(emission factor, lb. pollutant/1,000 in. cut, 1" thick)

Emissions, lbs/day = emissions, lbs/hr x 24 hrs/day

Emissions, tons/yr = emissions, lb/hr x 8,760 hrs/day x 1 ton/2,000 lbs.

Plasma cutting emission factors are from the American Welding Society study published in Sweden (March 1994).

Welding and other flame cutting emission factors are from an internal training session document.

See AP-42, Chapter 12.19 for additional emission factors for welding.