



Mitchell E. Daniels, Jr.
Governor

Thomas W. Easterly
Commissioner

100 North Senate Avenue
Indianapolis, Indiana 46204
(317) 232-8603
(800) 451-6027
www.IN.gov/idem

TO: Interested Parties / Applicant
DATE: May 27, 2005
RE: Parker Hannifin Corporation / 003-15492-00265
FROM: Paul Dubenetzky
Chief, Permits Branch
Office of Air Quality

Notice of Decision – Approval

Please be advised that on behalf of the Commissioner of the Department of Environmental Management, I have issued a decision regarding the enclosed matter. Pursuant to 326 IAC 2, this approval was effective immediately upon submittal of the application.

If you wish to challenge this decision, IC 4-21.5-3-7 requires that you file a petition for administrative review. This petition may include a request for stay of effectiveness and must be submitted to the Office of Environmental Adjudication, 100 North Senate Avenue, Government Center North, Room 1049, Indianapolis, IN 46204, **within eighteen (18) calendar days from the mailing of this notice**. The filing of a petition for administrative review is complete on the earliest of the following dates that apply to the filing:

- (1) the date the document is delivered to the Office of Environmental Adjudication (OEA);
- (2) the date of the postmark on the envelope containing the document, if the document is mailed to OEA by U.S. mail; or
- (3) The date on which the document is deposited with a private carrier, as shown by receipt issued by the carrier, if the document is sent to the OEA by private carrier.

The petition must include facts demonstrating that you are either the applicant, a person aggrieved or adversely affected by the decision or otherwise entitled to review by law. Please identify the permit, decision, or other order for which you seek review by permit number, name of the applicant, location, date of this notice and all of the following:

- (1) the name and address of the person making the request;
- (2) the interest of the person making the request;
- (3) identification of any persons represented by the person making the request;
- (4) the reasons, with particularity, for the request;
- (5) the issues, with particularity, proposed for considerations at any hearing; and
- (6) identification of the terms and conditions which, in the judgment of the person making the request, would be appropriate in the case in question to satisfy the requirements of the law governing documents of the type issued by the Commissioner.

If you have technical questions regarding the enclosed documents, please contact the Office of Air Quality, Permits Branch at (317) 233-0178. Callers from within Indiana may call toll-free at 1-800-451-6027, ext. 3-0178.

Enclosures
FNPER-AM.dot 1/10/05



INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT

We make Indiana a cleaner, healthier place to live.

Mitchell E. Daniels, Jr.
Governor

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May 27, 2005

Mr. Chad Easley
Parker Hannifin Corporation
10801 Rose Ave.
New Haven, IN 46774

Re: Exempt Construction and Operation Status,
003-15492-00265

Dear Mr. Easley:

The application from Parker Hannifin Corporation, received on April 9, 2002, has been reviewed. Based on the data submitted and the provisions in 326 IAC 2-1.1-3, it has been determined that the following air conditioning valve manufacturing source, located at 10801 Rose Avenue, New Haven, Indiana, is classified as exempt from air pollution permit requirements:

- (a) One (1) brass chip storage silo, using enclosed conveyors, capacity: 3,900 tons of brass chips per year.
- (b) Seven (7) electric braze furnaces, identified as Machine Asset Numbers K-482, M-498, P-338, P-8573, P-9029, P-8142, and P-302, each equipped with two (2) natural gas pilot lights, capacity: 0.005 million British thermal units per hour and six hundred (600) pounds of metal per hour, each, and 600 pounds of metal per hour, 0.098 tons per year of flux and 0.420 tons per year of wire, total, including all braze furnaces.
- (c) One (1) natural gas-fired thermal deburr unit, identified as Machine Asset Number 410, exhausting to Stack 410, capacity: 0.05 million British thermal units per hour.
- (d) Six (6) natural gas-fired roof top heating units, identified as RT 1 through RT 6, capacity: 1.0 million British thermal units per hour, each.
- (e) Nine (9) electric helium testers, identified as 750, 717, 9958, 136, 27966900, 27969700, 27988100, 28011600, and 13065902, capacity: ten (10) cubic feet per hour of helium, each.
- (f) One (1) electric annealing furnace, identified as Machine Asset Number P-8212, equipped with two (2) natural gas pilot lights, capacity: 0.005 million British thermal units per hour and six hundred (600) pounds of metal per hour.
- (g) Seven (7) electric braze furnaces, identified as Machine Asset Numbers K372, 39, 7032, 20488, P1111, 25645100 and 22717400, each equipped with two (2) natural gas pilot lights, capacity: 0.005 million British thermal units per hour and six hundred (600) pounds per hour, each, and 600 pounds per hour, 0.098 tons per year of flux and 0.420 tons per year of wire, total, including all braze furnaces.

- (h) Four (4) copper cutting shears, one (1) crown cutting sheer, and three (3) Vulcan cutting shears, capacity: 175 pounds per hour, each.
- (i) Brass machining operations, including cutting and crimping, capacity: 750 pounds per hour.
- (j) Three (3) cold cleaner parts washers, using only a solvent free cleaner.
- (k) Four (4) electric, hot parts washers, identified as Machine Asset Numbers 7, 694, 724, 2441, using only a non-VOC, non-HAP acid bath.
- (l) One (1) wastewater treatment plant, including a sludge dryer, for treatment of heavy metals only, no VOCs or HAPs, capacity: 6,020 cubic feet of natural gas per hour.

The following conditions shall be applicable:

- (1) Pursuant to 326 IAC 5-1-2 (Opacity Limitations) except as provided in 326 IAC 5-1-3 (Temporary alternative opacity limitations), opacity shall meet the following:
 - (a) Opacity shall not exceed an average of forty percent (40%) in any one (1) six (6) minute averaging period as determined in 326 IAC 5-1-4.
 - (b) Opacity shall not exceed sixty percent (60%) for more than a cumulative total of 15 minutes (60 readings) in a 6-hour period as measured according to 40 CFR 60, Appendix A, Method 9 or fifteen (15) one (1) minute nonoverlapping integrated averages for a continuous opacity monitor in a six (6) hour period.

An application or notification shall be submitted in accordance with 326 IAC 2 to the Office of Air Quality (OAQ) if the source proposes to construct new emission units, modify existing emission units, or otherwise modify the source.

Sincerely,
Original signed by

Paul Dubenetzky, Chief
Permits Branch
Office of Air Quality

CAP/MES

cc: File - Allen County
Allen County Health Department
Air Compliance - Patrick Burton
Permit Tracking
Compliance Data Section

**Indiana Department of Environmental Management
Office of Air Quality**

Technical Support Document (TSD) for an Exemption

Source Background and Description

Source Name: Parker Hannifin Corporation
Source Location: 10801 Rose Avenue, New Haven, IN 46774
County: Allen
SIC Code: 3585
Exemption No.: 003-15492-00265
Permit Reviewer: CarrieAnn Paukowits/MES

The Office of Air Quality (OAQ) has reviewed an application from Parker Hannifin Corporation relating to the operation of an air conditioning valve manufacturing source.

Permitted Emission Units and Pollution Control Equipment

The source consists of the following permitted emission units and pollution control devices:

- (a) One (1) brass chip storage silo, using enclosed conveyors, capacity: 3,900 tons of brass chips per year.
- (b) Seven (7) electric braze furnaces, identified as Machine Asset Numbers K-482, M-498, P-338, P-8573, P-9029, P-8142, and P-302, each equipped with two (2) natural gas pilot lights, capacity: 0.005 million British thermal units per hour and six hundred (600) pounds of metal per hour, each, and 600 pounds of metal per hour, 0.098 tons per year of flux and 0.420 tons per year of wire, total, including all braze furnaces.
- (c) One (1) natural gas-fired thermal deburr unit, identified as Machine Asset Number 410, exhausting to Stack 410, capacity: 0.05 million British thermal units per hour.

Unpermitted Emission Units and Pollution Control Equipment

The source also consists of the following unpermitted emission units, which did not require approvals:

- (a) Six (6) natural gas-fired roof top heating units, identified as RT 1 through RT 6, capacity: 1.0 million British thermal units per hour, each.
- (b) Nine (9) electric helium testers, identified as 750, 717, 9958, 136, 27966900, 27969700, 27988100, 28011600, and 13065902, capacity: ten (10) cubic feet per hour of helium, each.
- (c) One (1) electric annealing furnace, identified as Machine Asset Number P-8212, equipped with two (2) natural gas pilot lights, capacity: 0.005 million British thermal units per hour and six hundred (600) pounds of metal per hour.
- (d) Seven (7) electric braze furnaces, identified as Machine Asset Numbers K372, 39, 7032, 20488, P1111, 25645100 and 22717400, each equipped with two (2) natural gas pilot lights, capacity: 0.005 million British thermal units per hour and six hundred (600) pounds per hour, each, and 600 pounds per hour, 0.098 tons per year of flux and 0.420 tons per year of wire, total, including all braze furnaces.

- (e) Four (4) copper cutting shears, one (1) crown cutting sheer, and three (3) Vulcan cutting shears, capacity: 175 pounds per hour, each.
- (f) Brass machining operations, including cutting and crimping, capacity: 750 pounds per hour.
- (g) Three (3) cold cleaner parts washers, using only a solvent free cleaner.
- (h) Four (4) electric, hot parts washers, identified as Machine Asset Numbers 7, 694, 724, 2441, using only a non-VOC, non-HAP acid bath.
- (i) One (1) wastewater treatment plant, including a sludge dryer, for treatment of heavy metals only, no VOCs or HAPs, capacity: 6,020 cubic feet of natural gas per hour.

New Emission Units and Pollution Control Equipment

There is no new equipment proposed at this time.

Existing Approvals

The source has been operating under previous approvals including, but not limited to, the following:

- (a) Exemption 003-4242, issued February 16, 1995;
- (b) Exemption 003-4336, issued March 1, 1995;
- (c) Exemption 003-4429, issued May 11, 1995;
- (d) Exemption 003-4967, issued December 19, 1995;
- (e) Registration 003-5522, issued September 17, 1996;
- (f) Administrative Amendment 003-6590, issued October 2, 1996;
- (g) Registration 003-6823, issued October 16, 1996;
- (h) Exemption 003-8090, issued March 4, 1997;
- (i) Registration 003-9150, issued February 16, 1998;
- (j) Exemption 003-9396, issued May 19, 1998;
- (k) Exemption 003-10454, issued February 10, 1999; and
- (l) Exemption 003-11916, issued April 13, 2000.

All conditions from previous approvals were incorporated into this permit except the following:

- (a) Exemption 003-10454, issued February 10, 1999, and Exemption 003-11916, issued April 13, 2000

Condition (1): Annual Notice Requirements

Reason not incorporated: There is no annual notice required for this exempt source.

(b) Exemption 003-4967, issued December 19, 1995

Condition: Any change or modification which may increase the potential volatile organic compound emissions to 15 pounds per day or particulate matter emissions to 25 pounds per day or more from the equipment covered in this exemption must be approved by the Office of Air Management (OAM) before such change may occur.

Exemption 003-4242, issued March 23, 1991

Condition: Any change or modification which may increase the particulate emissions to twenty-five (25) pounds per day or more of particulate matter from the equipment covered in this letter must be approved by the Office of Air Management before such change may occur.

Exemption 003-4336, issued March 1, 1995

Condition: Any change or modification which may increase the potential emissions to 25 pounds per day or more nitrogen oxide from the equipment covered in this letter must be approved by the Office of Air Management before such change may occur.

Exemption 003-4429, issued May 11, 1995

Condition: Any change or modification which may increase the potential emissions to 25 pounds of oxides of nitrogen per day or more from the equipment covered in this letter must be approved by the Office of Air Management before such change may occur.

Registration 003-9150, issued February 16, 1998

Condition: Any change or modification which may increase the potential emissions of any pollutant to twenty-five (25) tons per year or more from the equipment covered in this Registration must be approved by the Office of Air Management (OAM) before such change may occur.

Exemption 003-9396, issued May 19, 1998

Condition: Any change or modification which may increase the potential of oxides of nitrogen (NO_x) emissions to twenty-five (25) pounds per day or more from the equipment covered in this exemption must be approved by the Office of Air Management (OAM) before such change may occur.

Reason not incorporated: Under the current rules, any change or modification which may increase the potential VOC emissions to ten (10) tons per year, NO_x emissions to ten (10) tons per year, or particulate matter emissions to five (5) tons per year or more from the entire source would require a Registration, at a minimum, and must be approved by IDEM, OAQ, before such change may occur. The exemption letter states, "An application or notification shall be submitted in accordance with 326 IAC 2 to the Office of Air Quality (OAQ) if the source proposes to construct new emission units, modify existing emission units, or otherwise modify the source."

(c) Exemption 003-8090, issued March 4, 1997

Condition (2): Pursuant to 326 IAC 2-1-2, the allowable particulate matter (PM) emissions from the soldering station are limited to one (1) pound per hour. This limitation will not exceed the registration level limit of 25 pounds per day. This limitation will also satisfy

the requirements of 326 IAC 6-3-2 (Particulate Emissions Limitations for Process Operations).

Reason not incorporated: The soldering station has been removed from this source.

- (d) Registration 003-6823, issued October 16, 1996

Condition: Pursuant to 326 IAC 6-3-2 (Particulate Emissions Limitations for Process Operations), the PM emissions from the electric braze furnace shall not exceed 2 pounds per hour.

Reason not incorporated: Pursuant to 326 IAC 6-3-2(b)(14), the electric braze furnaces are exempt from the requirements of 326 IAC 6-3-2.

- (e) Registration 003-5522, issued September 17, 1996

Condition: 326 IAC 8-3-5, Cold Cleaner Degreaser Operation and Control

Reason not incorporated: The cold cleaner degreasers at this source use only solvent free cleaners. Therefore, the requirements of 326 IAC 8-3 are not applicable.

Enforcement Issue

There are no enforcement actions pending. The unpermitted units are exempt and did not require construction or operation approval.

Recommendation

The staff recommends to the Commissioner that the operation be approved. This recommendation is based on the following facts and conditions:

Unless otherwise stated, information used in this review was derived from the application and additional information submitted by the applicant.

An application for the purposes of this review was received on April 9, 2002, with additional information received on July 2, 2003, September 3, 2004, February 22, 2005, and May 20, 2005.

Emission Calculations

See Appendix A of this document for detailed emission calculations (two pages) for natural gas combustion. Assuming all of the flux and wire used at the braze furnaces is emitted as particulate, the emissions would only be 0.518 tons per year from those units. All other processes at this source have only negligible emissions.

Potential to Emit of the Source Before Controls

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/yr)
PM	0.619
PM ₁₀	0.922
SO ₂	0.032
VOC	0.293
CO	4.47
NO _x	5.32

HAPs	Potential to Emit (tons/yr)
Benzene	Negligible
Dichlorobenzene	Negligible
Formaldehyde	0.004
Hexane	0.096
Toluene	Negligible
Lead	Negligible
Cadmium	Negligible
Chromium	Negligible
Manganese	Negligible
Nickel	Negligible
Total	0.100

- (a) The potential to emit (as defined in 326 IAC 2-7-1(29)) of all pollutants are less than the levels listed in 326 IAC 2-1.1-3(d)(1). Therefore, the source is subject to the provisions of 326 IAC 2-1.1-3. An exemption will be issued.
- (b) The potential to emit (as defined in 326 IAC 2-7-1(29)) of any single HAP is less than ten (10) tons per year and/or the potential to emit (as defined in 326 IAC 2-7-1(29)) of a combination of HAPs is less than twenty-five (25) tons per year. Therefore, the source is subject to the provisions of 326 IAC 2-1.1-3. An exemption will be issued.
- (c) **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.

County Attainment Status

The source is located in Allen County.

Pollutant	Status
PM _{2.5}	attainment
PM ₁₀	attainment
SO ₂	attainment
NO ₂	attainment
1-Hour Ozone	attainment
8-Hour Ozone	basic nonattainment
CO	attainment
Lead	attainment

- (a) Volatile organic compounds (VOC) and nitrogen oxides (NO_x) are regulated under the Clean Air Act (CAA) for the purposes of attaining and maintaining the National Ambient Air Quality Standards (NAAQS) for ozone. Therefore, VOC and NO_x emissions are considered when evaluating the rule applicability relating to the ozone standards. Allen County has been designated as nonattainment for the 8-hour ozone standard. Therefore, VOC and NO_x emissions were reviewed pursuant to the requirements for Emission Offset.
- (b) Allen County has been classified as attainment or unclassifiable in Indiana for all remaining criteria pollutants. Therefore, these emissions were reviewed pursuant to the requirements for Prevention of Significant Deterioration (PSD), 326 IAC 2-2.

Part 70 Permit Determination

326 IAC 2-7 (Part 70 Permit Program)

This existing source is still not subject to the Part 70 Permit requirements because the potential to emit (PTE) of:

- (a) criteria pollutant is less than one-hundred (100) tons per year,
- (b) a single hazardous air pollutant (HAP) is less than ten (10) tons per year, and
- (c) the combination of HAPs is less than twenty-five (25) tons per year.

This status is based on all the air approvals issued to the source. This status has been verified by the OAQ inspector assigned to the source.

Federal Rule Applicability

- (a) There are no New Source Performance Standards (NSPS) (326 IAC 12 and 40 CFR Part 60) included in the permit for this source.
- (b) There are no National Emission Standards for Hazardous Air Pollutants (NESHAP)(326 IAC 14, 20 and 40 CFR Part 61, 63) included in the permit for this source.

State Rule Applicability – Entire Source

326 IAC 2-3 (Emission Offset)

The unrestricted potential VOC emissions and the unrestricted potential NO_x emissions are each less than one-hundred (100) tons per year. Therefore, this source is a minor source pursuant to 326 IAC 2-3, Emission Offset.

326 IAC 2-2 (Prevention of Significant Deterioration (PSD))

The unrestricted potential emissions of each attainment criteria pollutant are less than two-hundred fifty (250) tons per year. Therefore, this source, which is not one of the twenty-eight (28) listed source categories, is a minor source pursuant to 326 IAC 2-2, PSD.

326 IAC 2-4.1 (Major Sources of Hazardous Air Pollutants (HAP))

The operation of air conditioning valve manufacturing source will emit less than ten (10) tons per year of a single HAP and twenty-five (25) tons per year of a combination of HAPs. Therefore, 326 IAC 2-4.1 does not apply.

326 IAC 2-6 (Emission Reporting)

This source is not located in Lake or Porter County with the potential to emit greater than twenty-five (25) tons per year of NO_x, does not emit five (5) tons per year or more of lead and does not require a Part 70 Operating Permit. Therefore, the requirements of 326 IAC 2-6 do not apply.

326 IAC 5-1 (Opacity Limitations)

Pursuant to 326 IAC 5-1-2 (Opacity limitations), except as provided in 326 IAC 5-1-3 (Temporary alternative opacity limitations), opacity shall meet the following:

- (a) Opacity shall not exceed an average of forty percent (40%) in any one (1) six (6) minute averaging period as determined in 326 IAC 5-1-4.
- (b) Opacity shall not exceed sixty percent (60%) for more than a cumulative total of fifteen (15) minutes (sixty (60) readings as measured according to 40 CFR 60, Appendix A, Method 9 or fifteen (15) one (1) minute nonoverlapping integrated averages for a continuous opacity monitor) in a six (6) hour period.

State Rule Applicability – Individual Facilities

326 IAC 6-3 (Particulate Emission Limitations for Manufacturing Processes)

The potential particulate emissions from the brass chip storage silo, electric braze furnaces, deburr unit, heaters, helium testers, cutting sheers, machining operations, parts washers and wastewater treatment plant are all less than 0.551 pounds per hour, each. Therefore, pursuant to 326 IAC 6-3-1(b)(14), the requirements of 326 IAC 6-3-2 are not applicable.

326 IAC 8-3 (Organic Solvent Degreasing Operations)

The cleaning operations at this source do not use any organic solvents. Therefore, the requirements of 326 IAC 8-3 are not applicable.

Conclusion

The operation of this air conditioning valve manufacturing source shall be subject to the conditions of the **Exemption 003-15492-00265**.

**Appendix A: Emissions Calculations
Natural Gas Combustion Only
MM BTU/HR <100**

**Company Name: Parker Hannifin Corporation
Address City IN Zip: 10801 Rose Avenue, New Haven, IN 46774
Permit Number: 003-15492
Plt ID: 003-00265
Reviewer: CarrieAnn Paukowits
Application Date: April 9, 2002**

Emission Factor in lb/MMCF	Pollutant					
	PM*	PM10*	SO2	NOx	VOC	CO
	1.90	7.60	0.600	100	5.50	84.0
			**see below			

*PM emission factor is filterable PM only. PM-10 emission factor is filterable and condensable PM-10 combined.

**Emission Factors for NOx: Uncontrolled = 100, Low NOx Burner = 50, Low NOx Burners/Flue gas recirculation = 32

Equipment	Heat Input Capacity MMBtu/hr	Potential Throughput MMCF/yr	Potential Emission in tons/yr					
			PM*	PM10*	SO2	NOx	VOC	CO
Electric Braze Furnaces (14) and Annealing Furnace (1)	0.08	0.657	0.001	0.002	0.0002	0.033	0.002	0.028
Thermal deburr unit	0.05	0.438	0.0004	0.002	0.0001	0.022	0.001	0.018
Roof Top Heating Units (6)	6.00	52.56	0.050	0.200	0.016	2.63	0.145	2.21
Wastewater Treatment Plant	6.02	52.74	0.050	0.200	0.016	2.64	0.145	2.21
Total	12.15	106	0.101	0.404	0.032	5.32	0.293	4.47

Methodology

All emission factors are based on normal firing.

MMBtu = 1,000,000 Btu

MMCF = 1,000,000 Cubic Feet of Gas

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

Emission Factors are from AP 42, Chapter 1.4, Tables 1.4-1, 1.4-2, 1.4-3, SCC #1-02-006-02, 1-01-006-02, 1-03-006-02, and 1-03-006-03

(SUPPLEMENT D 3/98)

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

See page 2 for HAPs emissions calculations.

**Appendix A: Emissions Calculations
 Natural Gas Combustion Only
 MM BTU/HR <100
 HAPs Emissions**

**Company Name: Parker Hannifin Corporation
 Address City IN Zip: 10801 Rose Avenue, New Haven, IN 46774
 Permit Number: 003-15492
 Pit ID: 003-00265
 Reviewer: CarrieAnn Paukowits
 Application Date: April 9, 2002**

HAPs - Organics

Emission Factor in lb/MMcf	Benzene 0.0021	Dichlorobenzene 0.0012	Formaldehyde 0.0750	Hexane 1.8000	Toluene 0.0034
Potential Emission in tons/yr	0.0001	0.00006	0.004	0.096	0.0002

HAPs - Metals

Emission Factor in lb/MMcf	Lead 0.0005	Cadmium 0.0011	Chromium 0.0014	Manganese 0.0004	Nickel 0.0021	Total HAPs
Potential Emission in tons/yr	0.00003	0.00006	0.00007	0.00002	0.0001	0.100

Methodology is the same as page 1.

The five highest organic and metal HAPs emission factors are provided above.
 Additional HAPs emission factors are available in AP-42, Chapter 1.4.