

217/782-2113

FEDERALLY ENFORCEABLE STATE OPERATING PERMIT -- RENEWAL

PERMITTEE

Heatcraft Worldwide Refrigeration
Attn: David Carson
1625 East Voorhees Street
Danville, Illinois 61832

<u>Application No.:</u> 73100087	<u>I.D. No.:</u> 183020AAN
<u>Applicant's Designation:</u> REFAC MFG	<u>Date Received:</u> October 27, 2005
<u>Subject:</u> Heatcraft Refrigeration Products Facility	
<u>Date Issued:</u> August 8, 2007	<u>Expiration Date:</u> August 8, 2012
<u>Location:</u> 1625 East Voorhees Street, Danville, Vermillion County, 61832	

This permit is hereby granted to the above-designated Permittee to OPERATE emission unit(s) and/or air pollution control equipment consisting of presses, paint spray booth controlled by filters, cold cleaning degreasers, adhesive operations, u-tube cutting operations and return bend machines, refrigerant charging stations, and welding booths 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 emissions of air pollutants from the source to less than major source thresholds (i.e., 100 tons/year for volatile organic material (VOM)). As a result the source is excluded from the requirement to obtain a Clean Air Act Permit Program (CAAPP) permit. The maximum emissions of this source, as limited by the conditions of this permit, are described in Attachment A.
 - b. Prior to issuance, a draft of this permit has undergone a public notice and comment period.
 - c. This permit supersedes all operating permits issued for this location.
- 2a. No person shall cause or allow the emission of smoke or other particulate matter, with an opacity greater than 30 percent, into the atmosphere from any emission unit other than those emission units subject to the requirements of 35 Ill. Adm. Code 212.122, pursuant to 35 Ill. Adm. Code 212.123(a), except as allowed by 35 Ill. Adm. Code 212.123(b) and 212.124.
 - b. Pursuant to 35 Ill. Adm. Code 212.321(a), no person shall cause or allow the emission of particulate matter into the atmosphere in any one hour period from any new process emission unit which, either alone or in combination with the emission of particulate matter from all other similar process emission units for which construction or modification commenced on or after April 14, 1972, at a source or premises, exceeds the allowable emission rates specified in subsection (c) of 35 Ill. Adm. Code 212.321.

3. Pursuant to 35 Ill. Adm. Code 214.301, no person shall cause or allow the emission of sulfur dioxide into the atmosphere from any process emission source to excess 2000 ppm.

4a. Pursuant to 35 Ill Adm. Code 215.181(a), the requirements of 35 Ill. Adm. Code 215.182 through 215.184 (Solvent Cleaning) shall not apply. to sources whose emissions of volatile organic material do not exceed 6.8 kg (15 lbs) in any one day, nor 1.4 kg (3 lbs) in any one hour.

b. Pursuant to 35 Ill Adm. Code 215.204(j), no owner or operator of a coating line shall cause or allow the emission of volatile organic material to exceed the following limitations on coating materials, excluding water and any compounds which are specifically exempted from the definition of volatile organic material pursuant to 35 Ill. Adm. Code Part 215, delivered to the coating applicator:

Miscellaneous Metal Parts and Products Coating	<u>kg/l</u>	<u>lb/gal</u>
i. Air dried coating	0.42	(3.5)
ii. All other coatings	0.36	(3.0)

c. Pursuant to 35 Ill. Adm. Code 215.206(b), the limitations of 35 Ill. Adm. Code 218 Subpart F shall not apply to touch-up and repair coatings used by a coating source described in 35 Ill. Adm. Code 215.204(b), (d), (f), (g), (i), and (j); provided that the source-wide volume of such coatings does not exceed 0.95 liter (1 quart) per eight-hour period or exceed 209 liters/year (55 gallons/year) for any rolling twelve-month period. Recordkeeping and reporting for touch-up and repair coatings shall be consistent with 35 Ill. Adm. Code 215.206(c).

d. Pursuant to 35 Ill. Adm. Code 215.206(d), "touch-up and repair coatings" means, for purposes of 35 Ill. Adm. Code 215.206, any coating used to cover minor scratches and nicks that occur during manufacturing and assembly processes.

e. Pursuant to 35 Ill. Adm. Code 215.209, no coating line subject to the limitations of 35 Ill. Adm. Code 215.204 is required to meet 35 Ill. Adm. Code 215.301 or 215.302 after the date by which the coating line is required to meet 35 Ill. Adm. Code 215.204.

f. Pursuant to 35 Ill. Adm. Code 215.301, no person shall cause or allow the discharge of more than 3.6 kg/hour (8 lbs/hour) of organic material into the atmosphere from any emission source, except as provided in 35 Ill. Adm. Code 215.302, 215.303, 215.304 and the following exception: If no odor nuisance exists the limitation of 35 Ill. Adm. Code 215 Subpart K shall apply only to photochemically reactive material.

5a. In the event that the operation of this emission unit results in an odor nuisance, the Permittee shall take appropriate and necessary actions to minimize odors, including but not limited to, changes in raw

material or installation of controls, in order to eliminate the odor nuisance.

- b. This permit is issued based on the facility using only clean up solvents containing no VOM. Use of clean up solvents containing VOM requires a permit change.

- 6a. Emissions of volatile organic material, VOM, and operation of the presses shall not exceed the following limits:

<u>Equipment</u>	<u>Material</u>	<u>Usage</u>		<u>VOM Emissions</u>	
		<u>(Tons/Mo)</u>	<u>(Tons/Yr)</u>	<u>(Tons/Mo)</u>	<u>(Tons/Yr)</u>
Presses	Oil	8.65	86.5	8.39	83.9

- b. Emissions of volatile organic material, VOM, and operation of the paint booths shall not exceed the following limits:

<u>Material</u>	<u>VOM Usage</u>		<u>VOM Emissions</u>	
	<u>(Tons/Mo)</u>	<u>(Tons/Yr)</u>	<u>(Tons/Mo)</u>	<u>(Tons/Yr)</u>
Coatings and Touch Up Paints	1.18	11.8	1.18	11.8

- c. These limits define the potential emissions of VOM and are based on maximum oil, paint, and coating usages, and the maximum VOM content.

- d. The VOM usage limits shall be calculated using the following equation:

$$T_e = \sum_{i=1}^n A_i B_i$$

Where:

T_e = Total VOM emission/usage from the paint booths each month in units of lbs/month or tons/month;

n = Number of different coatings and touch paint used each month in the paint booths;

i = Subscript denoting an individual coating and touch up paint;

A_i = VOM content of each coating and touch up paint (VOM content based on water included) as applied each month in the paint booths in units of lbs VOM/gallon or weight %; and

B_i = Amount of each individual coating and touch up paint as applied each month in the paint booths in units of gallons/month or tons/month.

- 7a. Emission and operation of the cold cleaning degreasers shall not exceed the following limits:

Solvent Consumed		VOM Emissions	
<u>(Gallons/Month)</u>	<u>(Gallons/Year)</u>	<u>(Tons/Month)</u>	<u>(Tons/Year)</u>
60	240	0.2	0.8

These limits are based on maximum solvent consumed, solvent density and VOM content of 6.7 lbs/gallon, and emissions determined by material balance.

- b. Solvent consumption shall be determined from the following equation:

$$U = V - W \times C/100$$

Where:

U - Solvent consumed;

V - Virgin solvent added to the process (gallons);

W - Certified amount of waste shipped off for recycling (gallons); and

C - Certified VOM content of waste solvent (weight %).

- 8a. Emissions and operation of all fuel combustion emission sources shall not exceed the following limits:

<u>Material</u>	<u>(mmscf/Mo)</u>	<u>(mmscf/Yr)</u>	<u>Pollutant</u>	Emission	Emissions	
				<u>Factor</u>	<u>(T/Mo)</u>	<u>(T/Yr)</u>
				<u>(Lbs/mmscf)</u>		
Natural Gas	60	300	NO _x	100	3.00	15.0
			CO	84	2.52	12.6
			PM	7.6	0.24	1.2
			VOM	5.5	0.17	0.83

These limits define the potential emissions of NO_x, CO, TSP, and VOM and are based on maximum fuel usage, units of 10,000 therms per mmscf and AP-42, tables 1.4-1 and 1.4-2 standard emission factors.

- b. Natural gas shall be the only fuel used in the fuel combustion emission sources. Use of any other fuel other than natural gas requires a permit change.
9. This permit is issued based on negligible emissions of VOM from the adhesive operations, u-tube cutting operations and return bed machines, refrigerant charging stations, and welding booths. For this purpose emissions from each emission source shall not exceed nominal emission rates of 0.1 lb/hour and 0.44 tons/year.
10. Compliance with the annual limits of this permit shall be determined on a monthly basis from the sum of the data for the current month plus the preceding 11 months (running 12 month total).

11. This permit is issued based on the Potential to Emit (PTE) for Hazardous Air Pollutants (HAPs) as listed in Section 112(b) of the Clean Air Act being less than 10 tons per year of any single HAP or 25 tons per year of any combination of such HAPs. As a result, this permit is issued based on the emissions of all HAPs from this source not triggering the requirement to obtain a Clean Air Act Permit Program (CAAPP) permit from the Illinois EPA.
- 12a. Pursuant to 35 Ill. Adm. Code 212.107, 212.109, and 212.110, testing for particulate matter emissions shall be performed as follows:
 - i. For both fugitive and nonfugitive particulate matter emissions, a determination as to the presence or absence of visible emissions from emission units shall be conducted in accordance with Method 22, 40 CFR part 60, Appendix A, incorporated by reference in 35 Ill. Adm. Code 212.113, except that the length of the observing period shall be at the discretion of the observer, but not less than one minute. This Condition shall not apply to 35 Ill. Adm. Code 212.301, pursuant to 35 Ill. Adm. Code 212.107.
 - ii. Except as otherwise provided in 35 Ill. Adm. Code Part 212, and except for the methods of data reduction when applied to 35 Ill. Adm. Code 212.122 and 212.123, measurements of opacity shall be conducted in accordance with Method 9, 40 CFR Part 60, Appendix A, and the procedures in 40 CFR 60.675(c) and (d), if applicable, incorporated by reference in 35 Ill. Adm. Code 212.113, except that for roadways and parking areas the number of readings required for each vehicle pass will be three taken at 5-second intervals. The first reading shall be at the point of maximum opacity and second and third readings shall be made at the same point, the observer standing at right angles to the plume at least 15 feet away from the plume and observing 4 feet above the surface of the roadway or parking area. After four vehicles have passed, the 12 readings will be averaged, pursuant to 35 Ill. Adm. Code 212.109.
 - iii. Measurement of particulate matter emissions from stationary emission units subject to 35 Ill. Adm. Code Part 212 shall be conducted in accordance with 40 CFR part 60, Appendix A, Methods 5, 5A, 5D, or 5E, pursuant to 35 Ill. Adm. Code 212.110(a).
 - iv. The volumetric flow rate and gas velocity shall be determined in accordance with 40 CFR part 60, Appendix A, Methods 1, 1A, 2, 2A, 2C, 2D, 3, and 4, pursuant to 35 Ill. Adm. Code 212.110(b).
 - v. Upon a written notification by the Illinois EPA, the owner or operator of a particulate matter emission unit subject to 35 Ill. Adm. Code Part 212 shall conduct the applicable testing for particulate matter emissions, opacity, or visible emissions at such person's own expense, to demonstrate compliance. Such test results shall be submitted to the Illinois EPA within thirty (30) days after conducting the test unless an alternative time for

submittal is agreed to by the Illinois EPA, pursuant to 35 Ill. Adm. Code 212.110(c).

- b. Testing required by Condition 12(a) shall be performed by a qualified independent testing service.
- 13a. Pursuant to 40 CFR 63.10(b)(3), if an owner or operator determines that his or her stationary source that emits (or has the potential to emit, without considering controls) one or more hazardous air pollutants regulated by any standard established pursuant to section 112(d) or (f) of the Clean Air Act, and that stationary source is in the source category regulated by the relevant standard, but that source is not subject to the relevant standard (or other requirement established under 40 CFR Part 63) because of limitations on the source's potential to emit or an exclusion, the owner or operator must keep a record of the applicability determination on site at the source for a period of 5 years after the determination, or until the source changes its operations to become an affected source, whichever comes first. The record of the applicability determination must be signed by the person making the determination and include an analysis (or other information) that demonstrates why the owner or operator believes the source is unaffected (e.g., because the source is an area source). The analysis (or other information) must be sufficiently detailed to allow the USEPA and/or Illinois EPA to make a finding about the source's applicability status with regard to the relevant standard or other requirement. If relevant, the analysis must be performed in accordance with requirements established in relevant subparts of 40 CFR Part 63 for this purpose for particular categories of stationary sources. If relevant, the analysis should be performed in accordance with USEPA guidance materials published to assist sources in making applicability determinations under Section 112 of the Clean Air Act, if any. The requirements to determine applicability of a standard under 40 CFR 63.1(b)(3) and to record the results of that determination under 40 CFR 63.10(b)(3) shall not by themselves create an obligation for the owner or operator to obtain a Title V permit.
- b. Pursuant to 35 Ill. Adm. Code 212.110(e), the owner or operator of an emission unit subject to 35 Ill. Adm. Code Part 212 shall retain records of all tests which are performed. These records shall be retained for at least three (3) years after the date a test is performed.
 - c. Pursuant to 35 Ill. Adm. Code 215.206(c), the owner or operator of a coating line or a group of coating lines using touch-up and repair coatings that are exempted from the limitations of 35 Ill. Adm. Code 215.204(b), (d), (f), (g), (i), and (j) because of the provisions of 35 Ill. Adm. Code 215.206(b) shall:
 - i. Collect and record the name, identification number, and volume of each touch-up and repair coating, as applied on each coating line, per eight-hour period and per month;

- ii. Perform calculations on a daily basis, and maintain at the source, records of such calculations of the combined volume of touch-up and repair coatings used source-wide for each eight-hour period;
 - iii. Perform calculations on a monthly basis, and maintain at the source, records of such calculations of the combined volume of touch-up and repair coatings used source-wide for the month and the rolling twelve-month period;
 - iv. Prepare and maintain at the source an annual summary of the information required to be compiled pursuant to 35 Ill. Adm. Code 215.206(b) on or before January 31 of the following year; and
 - v. Maintain at the source for a minimum of three years all records required to be kept under this subsection (c) and make such records available to the Illinois EPA upon request.
- d. The Permittee shall maintain records of the following items so as to demonstrate compliance with the conditions of this permit:
- i. Amount of oil used in the presses (tons/month and tons/year);
 - ii. Amount of each individual coating and touch paint used in the paint booth (gallons/month and gallons/year);
 - iii. VOM content of each individual oil, coating, touch up paint, and adhesive used (lbs VOM/gal or weight %);
 - iv. Amount of solvent consumed in the degreasers by keeping records of the virgin solvent added to the process (gallons), certified amount of waste shipped off for recycling (gallons), certified VOM content of waste solvent (weight %), and using the equation in Condition 6(d) (gallons/month and gallons/year);
 - v. Total natural gas usage (mmscf/month and mmscf/year); and
 - vi. Monthly and annual emissions of CO, NO_x, PM, SO₂, and VOM, with supporting calculations (tons/month and tons/year).
14. All records and logs required by this permit shall be retained at a readily accessible location at the source for at least five (5) 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.
15. If there is an exceedance or deviation from 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/deviation. The report shall include the emissions released in accordance with the recordkeeping requirements, a copy of the relevant records, and a description of the exceedance or deviation and efforts to reduce emissions and future occurrences.

16. Pursuant to 35 Ill. Adm. Code 212.110(d), a person planning to conduct testing for particulate matter emissions to demonstrate compliance shall give written notice to the Illinois EPA of that intent. Such notification shall be given at least thirty (30) days prior to the initiation of the test unless a shorter period is agreed to by the Illinois EPA. Such notification shall state the specific test methods from 35 Ill. Adm. Code 212.110 that will be used.
17. Pursuant to 35 Ill. Adm. Code 215.206(c), the owner or operator of a coating line or a group of coating lines using touch-up and repair coatings that are exempted from the limitations of 35 Ill. Adm. Code 215.204(b), (d), (f), (g), (i), and (j) because of the provisions of 35 Ill. Adm. Code 215.206(b) shall Notify the Illinois EPA in writing if the use of touch-up and repair coatings at the source ever exceeds a volume of 0.95 liter (1 quart) per eight-hour period or exceeds 209 liters/year (55 gallons/year) for any rolling twelve-month period within 30 days after any such exceedence. Such notification shall include a copy of any records of such exceedence.
18. Two (2) copies of required reports and notifications shall be sent to:

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

and one (1) copy shall be sent to the Illinois EPA's regional office at the following address unless otherwise indicated:

Illinois Environmental Protection Agency
Division of Air Pollution Control
2009 Mall Street
Collinsville, Illinois 62234

If you have any questions on this, please call George Kennedy at 217/782-2113.

Edwin C Bakowski, P.E.
Acting Manager, Permit Section
Division of Air Pollution Control

ECB:GMK:psj

cc: IEPA, FOS Region 3
Lotus Notes

Attachment A - Emission Summary

This attachment provides a summary of the maximum emissions from the refrigeration products manufacturing facility 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 such a plant. The resulting maximum emissions are below the levels (e.g., 100 tons per year of VOM) at which this source would be considered a major source for purposes of the Clean Air Act Permit Program. 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.

<u>Equipment/Operation</u>	E M I S S I O N S (Tons/Year)					
	<u>VOM</u>	<u>PM</u>	<u>NO_x</u>	<u>CO</u>	<u>HAPs</u>	
					<u>Single</u>	<u>Combined</u>
Presses Oil	83.90					
Coating and Touch Up Paints	11.80					
Cold Cleaning Degreasers	0.80					
Adhesive Operations	0.44					
U-Tube Cutting Operations	0.44					
Return Bed Machines	0.44					
Refrigerant Charging Stations	0.44					
Welding Booths	0.44					
Fuel Combustion	<u>0.83</u>	<u>1.2</u>	<u>15.0</u>	<u>12.6</u>	_____	_____
Total	99.53	1.2	15.0	12.6		

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