

217/785-1705

FEDERALLY ENFORCEABLE STATE OPERATING PERMIT -- RENEWAL

PERMITTEE

Champion
Attn: Tim Kuhn
1301 North Euclid Avenue
Princeton, Illinois 61356

Application No.: 98030108

I.D. No.: 011085ABG

Applicant's Designation:

Date Received: January 9, 2009

Subject: Compressor Manufacturing Plant

Date Issued:

Expiration Date:

Location: 1301 North Euclid Avenue, Princeton, Bureau County

This permit is hereby granted to the above-designated Permittee to OPERATE emission unit(s) and/or air pollution control equipment consisting of three paint spray booths (EP01, EP02, EP03) with filters, one 168 hp emergency diesel water pump, and small engine testing cells 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 per year for Volatile Organic Material (VOM), and 10 tons/year for any single Hazardous Air Pollutant (HAP) and 25 tons/year for any combination of such HAPs). 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. Pursuant to 40 CFR 63.6585, the owner or operator of a stationary reciprocating internal combustion engine (RICE) located at a major or area source of HAP emissions is subject to National Emissions Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines, 40 CFR 63 Subpart ZZZZ.
 - b. Pursuant to 40 CFR 63.6590(a)(1)(iii), a stationary RICE located at an area source of HAP emissions is existing if you commenced construction or reconstruction of the stationary RICE before June 12, 2006.
 - c. Pursuant to 40 CFR 63.6595(a)(1), an existing stationary compression ignition (CI) RICE located at an area source of HAP emissions must comply with the applicable emission limitations, operating limitations, and other requirements no later than May 3, 2013.

- 3a. Pursuant to 35 Ill. Adm. Code 212.123(a), 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 35 Ill. Adm. Code 212.122.
- b. Pursuant to 35 Ill. Adm. Code 212.123(b), the emission of smoke or other particulate matter from any such emission unit may have an opacity greater than 30 percent but not greater than 60 percent for a period or periods aggregating 8 minutes in any 60 minute period provided that such opaque emissions permitted during any 60 minute period shall occur from only one such emission unit located within a 305 m (1000 ft) radius from the center point of any other such emission unit owned or operated by such person, and provided further that such opaque emissions permitted from each such emission unit shall be limited to 3 times in any 24 hour period.
- c. 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 35 Ill. Adm. Code 212.321(c).
- 4a. 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.
- b. 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.
5. Pursuant to 35 Ill. Adm. Code 215.206(a)(1), the limitations of 35 Ill. Adm. Code Part 215, Subpart F: Coating Operations shall not apply to coating plants in which emissions of volatile organic material as limited by the operating permit will not exceed 22.7 Mg/year (25 ton/year), in the absence of air pollution control equipment.
6. Pursuant to 40 CFR 63.6603(a), if you own or operate an existing stationary RICE located at an area source of HAP emissions, you must comply with the requirements in Table 2d to 40 CFR 63 Subpart ZZZZ which apply to you.

Table 2d to Subpart ZZZZ of Part 63 – Requirements for Existing Stationary RICE Located at Area Sources of HAP Emissions

4. Emergency stationary CI RICE and black start stationary CI RICE. ²	a. Change oil and filter every 500 hours of operation or annually, whichever comes first; ¹
	b. Inspect air cleaner every 1,000 hours of operation or annually, whichever comes first, and replace as necessary; and
	c. Inspect all hoses and belts every 500 hours of operation or annually, whichever comes first, and replace as necessary

¹ Sources have the option to utilize an oil analysis program as described in §63.6625(i) or (j) in order to extend the specified oil change requirement in Table 2d of this subpart.

² If an emergency engine is operating during an emergency and it is not possible to shut down the engine in order to perform the management practice requirements on the schedule required in Table 2d of this subpart, or if performing the management practice on the required schedule would otherwise pose an unacceptable risk under federal, state, or local law, the management practice can be delayed until the emergency is over or the unacceptable risk under federal, state, or local law has abated.

- 7a. This permit is issued based on the source not being subject to the National Emission Standards for Hazardous Air Pollutants (NESHAP) for Paint Stripping And Miscellaneous Surface Coating at Area Sources, 40 CFR Part 63 Subpart HHHHHH because the source will not be used to perform spray application of coatings that contain the target HAP, as defined in 40 CFR 63.11180, to a plastic and/or metal substrate on a part or product.
- b. This permit is issued based on the source not being subject to the National Emission Standard for Hazardous Air Pollutants (NESHAP) for Nine Metal Fabrication and Finishing Source Categories, 40 CFR 63 Subpart XXXXXX, because the source does not use materials that contain or have the potential to emit metal fabrication or finishing metal HAP (MFHAP), defined to be the compounds of cadmium, chromium, lead, manganese, and nickel, or any of these metals in the elemental form with the exception of lead. Materials that contain MFHAP are defined to be materials that contain greater than 0.1 percent for carcinogens, as defined by OSHA at 29 CFR 1910.1200(d)(4), and greater than 1.0 percent for noncarcinogens.
- 8a. Pursuant to 40 CFR 63.6604, beginning January 1, 2015, if you own or operate an existing emergency CI stationary RICE with a site rating of more than 100 brake HP and a displacement of less than 30 liters per cylinder that uses diesel fuel and operates or is contractually obligated to be available for more than 15 hours per calendar year for the purposes specified in 40 CFR 63.6640(f)(2)(ii) and (iii) or that operates for the purpose specified in 40 CFR 63.6640(f)(4)(ii), you must use diesel fuel that meets the requirements in 40 CFR 80.510(b)

for nonroad diesel fuel, except that any existing diesel fuel purchased (or otherwise obtained) prior to January 1, 2015, may be used until depleted.

- b. Pursuant to 40 CFR 80.510(b), all NR and LM diesel fuel is subject to the following per-gallon standards:
 - i. Sulfur content 15 ppm maximum for NR diesel fuel.
 - ii. Cetane index or aromatic content, as follows:
 - A. A minimum cetane index of 40; or
 - B. A maximum aromatic content of 35 volume percent.
- c. Pursuant to 40 CFR 63.6640(f), if you own or operate an emergency stationary RICE, you must operate the emergency stationary RICE according to the requirements in paragraphs 40 CFR 63.6640(f)(1) through (4). In order for the engine to be considered an emergency stationary RICE under this subpart, any operation other than emergency operation, maintenance and testing, emergency demand response, and operation in non-emergency situations for 50 hours per year, as described in paragraphs 40 CFR 63.6640(f)(1) through (4), is prohibited. If you do not operate the engine according to the requirements in paragraphs 40 CFR 63.6640(f)(1) through (4), the engine will not be considered an emergency engine under this subpart and must meet all requirements for non-emergency engines.
 - i. There is no time limit on the use of emergency stationary RICE in emergency situations.
 - ii. You may operate your emergency stationary RICE for any combination of the purposes specified in paragraphs 40 CFR 63.6640(f)(2)(i) through (iii) for a maximum of 100 hours per calendar year. Any operation for non-emergency situations as allowed by paragraphs 40 CFR 63.6640(f)(3) and (4) counts as part of the 100 hours per calendar year allowed by paragraph 40 CFR 63.6640(f)(2).
 - iii. Emergency stationary RICE located at area sources of HAP may be operated for up to 50 hours per calendar year in non-emergency situations. The 50 hours of operation in non-emergency situations are counted as part of the 100 hours per calendar year for maintenance and testing and emergency demand response provided in paragraph (f)(2) of this section. Except as provided in paragraphs (f)(4)(i) and (ii) of this section, the 50 hours per year for non-emergency situations cannot be used for peak shaving or non-emergency demand response, or to generate income for a facility to an electric grid or otherwise supply power as part of a financial arrangement with another entity.

- 9. In the event that the operation of this source 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.
- 10a. The Permittee shall, in accordance with the manufacturer(s) and/or vendor(s) recommendations, perform periodic maintenance on the pollution control equipment covered under this permit such that the pollution control equipment be kept in proper working condition and not cause a violation of the Illinois Environmental Protection Act or regulations promulgated therein.
- 11a. Emissions and operation of the three paint spray booths (EP01, EP02, EP03) shall not exceed the following limits:

VOM Usage		VOM Emissions	
<u>(T/Mo)</u>	<u>(T/Yr)</u>	<u>(T/Mo)</u>	<u>(T/Yr)</u>
2.1	21.0	2.1	21.0

These limits are based on maximum coating and cleanup solvent usage, the maximum VOM content of the coating and cleanup solvents.

- b. This permit is issued based on negligible emissions of particulate matter from three paint spray booths (EP01, EP02, EP03) with filters. For this purpose emissions from each such source shall not exceed nominal emission rates of 0.1 lb/hour and 0.44 tons/year.
- c. This permit is issued based on negligible emissions of volatile organic material from the emergency water pump and small engine testing cells. For this purpose emissions from each group shall not exceed nominal emission rates of 0.1 lb/hour and 0.44 tons/year.
- d. This permit is issued based on negligible emissions of Nitrogen Oxides (NO_x), Carbon Monoxide (CO) and Sulfur Dioxide (SO₂) from small engine testing cells. For this purpose emissions of each pollutant shall not exceed nominal emission rates of 0.1 lb/hour and 0.44 tons/year. These limits are based on the usage of less than 200 gallons of gasoline and 50 gallons of diesel fuel oil in tested engines per year.
- e. The emissions of Hazardous Air Pollutants (HAPs) as listed in Section 112(b) of the Clean Air Act from the source shall not exceed 0.9 tons/month and 9.0 tons/year of any single HAP and 2.25 tons/month and 22.5 tons/year of any combination of such HAPs. As a result of this condition, this permit is issued based on the emissions of any HAP from this source not triggering the requirement to obtain a CAAPP permit from the Illinois EPA.
- f. 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).

- g. Note: That there is a "nested" limit on the emissions of HAPs as a result of the limit on VOM emissions. The HAPs emitted at this source have been determined to be VOM and therefore limiting VOM emissions also limits HAP emissions.
12. Pursuant to 40 CFR 63.6625(i), if you own or operate a stationary CI engine that is subject to the work, operation or management practices in items 1 or 2 of Table 2c to 40 CFR 63 Subpart ZZZZ or in items 1 or 4 of Table 2d to 40 CFR 63 Subpart ZZZZ, you have the option of utilizing an oil analysis program in order to extend the specified oil change requirement in Tables 2c and 2d to 40 CFR 63 Subpart ZZZZ. The oil analysis must be performed at the same frequency specified for changing the oil in Table 2d to 40 CFR 63 Subpart ZZZZ. The analysis program must at a minimum analyze the following three parameters: Total Base Number, viscosity, and percent water content. The condemning limits for these parameters are as follows: Total Base Number is less than 30 percent of the Total Base Number of the oil when new; viscosity of the oil has changed by more than 20 percent from the viscosity of the oil when new; or percent water content (by volume) is greater than 0.5. If all of these condemning limits are not exceeded, the engine owner or operator is not required to change the oil. If any of the limits are exceeded, the engine owner or operator must change the oil within 2 days of receiving the results of the analysis; if the engine is not in operation when the results of the analysis are received, the engine owner or operator must change the oil within 2 days or before commencing operation, whichever is later. The owner or operator must keep records of the parameters that are analyzed as part of the program, the results of the analysis, and the oil changes for the engine. The analysis program must be part of the maintenance plan for the engine.
13. 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.

14. The Permittee shall comply with applicable notification, reporting and recordkeeping requirements of 40 CFR 63.6645, 63.6650 and 63.6655 for emergency engine operations.
- 15a. The Permittee shall maintain records of the following items, and such other items as may be appropriate to allow the Illinois EPA to review compliance with the limits in this permit.
 - i. Amounts of each VOM and/or HAP-containing material (gal/mo, gal/yr);
 - ii. VOM and HAP contents of all materials (lb/gal or wt%);
 - iii. Density of items in i. (lb/gal)
 - iv. Type and amount of fuel burned for engine testing cells(gal/mo, gal/yr)
 - v. VOM and HAP usage and emissions (tons/mo, tons/yr) with supporting calculations.
- b. 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.
16. If there is an exceedance of or a deviation from 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 or 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.
17. 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 regional office at the following address unless otherwise indicated:

Illinois Environmental Protection Agency
Division of Air Pollution Control
5415 North University
Peoria, Illinois 61614

If you have any questions on this permit, please call Randy Solomon at 217/785-1705.

Robert W. Bernoteit
Acting Manager, Permit Section
Division of Air Pollution Control

Date Signed: _____

RWB:RBS:

cc: Illinois EPA, FOS Region 2
Lotus Notes

Attachment A - Emission Summary

This attachment provides a summary of the maximum emissions from the air and gas compressor coating 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 such a plant. This is using less than 25 tons per year of volatile organic material, less than 10 tons per year of any individual hazardous air pollutant, and less than 25 tons per year of any combination of hazardous air pollutants. The resulting maximum emissions are below the levels, e.g., 100 tons per year of volatile organic material, 10 tons per year of individual hazardous air pollutants, and 25 tons per year of a combination of hazardous air pollutants 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, less volatile organic material and hazardous air pollutants are used and control measures are more effective than required in this permit.

<u>Emission Unit</u>	<u>E M I S S I O N S (Tons/Year)</u>						
	<u>CO</u>	<u>NO_x</u>	<u>PM</u>	<u>SO₂</u>	<u>VOM</u>	<u>Single HAP</u>	<u>Total HAPs</u>
Coating Operations			0.44		21.0		
Water Pump					0.44		
Test Cells	<u>0.44</u>	<u>0.44</u>		<u>0.44</u>	<u>0.44</u>		
Totals	<u>0.44</u>	<u>0.44</u>	0.44	<u>0.44</u>	<u>21.9</u>	9.0	22.5

RBS: