

217/785-1705

FEDERALLY ENFORCEABLE STATE OPERATING PERMIT -- NSPS SOURCE -- RENEWAL

PERMITTEE

SKF Sealing Solutions
Attn: Mr. Bob Marciniec
900 North State Street
Elgin, Illinois 60123-2147

Application No.: 72111195

I.D. No.: 089438AAB

Applicant's Designation:

Date Received: June 13, 2011

Subject: Sealing and Aerospace Products

Date Issued:

Expiration Date:

Location: 900 North State Street, Elgin, Kane County

This permit is hereby granted to the above-designated Permittee to OPERATE emission source(s) and/or air pollution control equipment consisting of a sealing products manufacturing operation, which includes four (4) adhesive lines (nutro spray booth tumbler, two (2) screw cementers connected to one (1) dryer, and one (1) screw cementer connected to one dryer) all controlled by one (1) regenerative thermal oxidizer (RTO), one (1) spray and dip line PDO, one (1) spray and dip line PED, one (1) aerospace race chemline, one (1) aerospace molding/dip line, one (1) 25.2 mmBtu/hr (750 hp) boiler/millroom HVAC unit, unit heaters and air handling units, material storage and mixing operations, and ancillary equipment 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:
 - i. 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), 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.
 - ii. To establish federally enforceable production and operating limitations, which restrict the potential to emit to less than 10 tons/year for any individual Hazardous Air Pollutant (HAP) and 25 tons/year of any combination of such HAPs so that the source is not subject to the requirements of the National Emission Standards for Hazardous Air Pollutants (NESHAP) for Aerospace Manufacturing and Rework Facilities, 40 CFR 63 Subpart GG.
 - iii. To establish federally enforceable production and operating limitations, which restrict the potential to emit to less than 10 tons/year for any individual Hazardous Air Pollutant (HAP) and 25 tons/year of any combination of such HAPs so that the source is not subject to the requirements of the National Emission

Standards for Hazardous Air Pollutants (NESHAP) for Surface Coating of Miscellaneous Metal Parts and Products, 40 CFR 63 Subpart MMMM.

- ii. To limit the potential emissions of VOM from the source to less than 25 tons/year. As a result, the source is excluded from the requirement of 35 Ill. Adm. Code Part 205, Emission Reduction Market System. The maximum emissions of this source, as limited by the conditions of this permit, are described in Attachment A.
 - iii. To establish federally enforceable production and operating limitations, which restrict the maximum theoretical emissions of VOM from the source to less than 100 tons/year and the potential to emit for VOM from the source to less than 25 tons/year so that the source is not subject to the requirements of 35 Ill. Adm. Code Part 218 Subpart PP (Miscellaneous Fabricated Product Manufacturing Processes).
- b. Prior to issuance, a draft of this permit has undergone a public notice and comment period.
 - c. This permit supersedes all operating permit(s) for this location.
2. The 25.2 mmBtu/hr (750 hp) gas-fired boiler is subject to the New Source Performance Standards (NSPS) for Small Industrial-Commercial Institutional Steam Generating Units, 40 CFR 60 Subparts A and Dc. The Illinois EPA administers the NSPS for subject sources in Illinois pursuant to a delegation agreement with the USEPA. Pursuant to 40 CFR 60.40c(a), except as provided in 40 CFR 60.40c(d), (e), (f), and (g), the affected facility to which 40 CFR 60 Subpart Dc applies is each steam generating unit for which construction, modification, or reconstruction is commenced after June 9, 1989 and that has a maximum design heat input capacity of 29 megawatts (MW) (100 million British thermal units per hour (mmBtu/hr)) or less, but greater than or equal to 2.9 MW (10 mmBtu/hr).
- 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), except as further provided in 35 Ill. Adm. Code Part 212, 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 218.301, no person shall cause or allow the discharge of more than 3.6 kg/hr (8 lbs/hr) of organic material into the atmosphere from any emission unit, except as provided in 35 Ill. Adm. Code 218.302, 218.303, or 218.304 and the following exception: If no odor nuisance exists the limitation of 35 Ill. Adm. Code Part 218 Subpart G (Use of Organic Material) shall apply only to photochemically reactive material.
- b. Pursuant to 35 Ill. Adm. Code 218.302(a), emissions of organic material in excess of those permitted by 35 Ill. Adm. Code 218.301 are allowable if such emissions are controlled by flame, thermal or catalytic incineration so as either to reduce such emissions to 10 ppm equivalent methane (molecular weight 16) or less, or to convert 85 percent of the hydrocarbons to carbon dioxide and water.
- c. The adhesive lines and the water-based coating lines and spray and dip operations at this source are subject to 35 Ill. Adm. Code Part 218 Subpart JJ (Miscellaneous Industrial Adhesives). Pursuant to 35 Ill. Adm. Code 218.900(a), except as provided in 35 Ill. Adm. Code 218.900(b), on and after May 1, 2012, the requirements of 35 Ill. Adm. Code Part 218 Subpart JJ shall apply to miscellaneous industrial adhesive application operations at sources where the total actual VOM emissions from all such operations, including related cleaning activities, equal or exceed 6.8 kg/day (15 lbs/day), calculated in accordance with 35 Ill. Adm. Code 218.904(a)(1)(B), in the absence of air pollution control equipment.
- d. Pursuant to 35 Ill. Adm. Code 218.901(a), the owner or operator of a source subject to the requirements of 35 Ill. Adm. Code Part 218 Subpart JJ shall comply with the limitations in 35 Ill. Adm. Code 218.901(b), (c), or (d), as well as with the limitations in 35 Ill. Adm. Code 218.901(e) and (f). Notwithstanding this requirement, sources subject to 35 Ill. Adm. Code 218.900(b)(2) shall comply with the limitations in 35 Ill. Adm. Code 218.901(f) only.
- e. Pursuant to 35 Ill. Adm. Code 218.901(b)(1), the owner or operator of adhesive application operations listed in 35 Ill. Adm. Code 218.901(b) shall comply with the following VOM emission limitations, minus water and any compounds that are specifically exempted from the definition of VOM, as applied. If an adhesive is used to bond dissimilar substrates together, the substrate category with the highest VOM emission limitation shall apply:

	kg VOM/l adhesive or adhesive primer applied	lb VOM/gal adhesive or adhesive primer applied
General adhesive application operations		
i. Reinforced plastic composite	0.200	(1.7)
ii. Flexible vinyl	0.250	(2.1)
iii. Metal	0.030	(0.3)
iv. Porous material (except wood)	0.120	(1.0)
v. Rubber	0.250	(2.1)
vi. Other substrates	0.250	(2.1)
f. Pursuant to 35 Ill. Adm. Code 218.901(d), no owner or operator of a source subject to 35 Ill. Adm. Code Part 218 Subpart JJ shall operate a miscellaneous industrial adhesive application operation employing a capture system and control device unless either:		
i. An afterburner or carbon adsorption system is used that provides at least 85 percent reduction in the overall emissions of VOM from the application operation;		
ii. The owner or operator complies with the applicable limitation set forth in 35 Ill. Adm. Code 218.901(b) by utilizing a combination of low-VOM adhesives and an afterburner or carbon adsorption system. The owner or operator may use an alternative capture and control system if the owner or operator submits a plan to the Illinois EPA detailing appropriate monitoring devices, test methods, recordkeeping requirements, and operating parameters for the capture and control system and the system is approved by the Illinois EPA and approved by USEPA as a SIP revision.		
5a. This permit is issued based on the aerospace race chemline and the aerospace molding/dip line not being subject to the National Emission Standards for Hazardous Air Pollutants (NESHAP) for Aerospace Manufacturing and Rework Facilities, 40 CFR 63 Subpart GG because this source is not a major source as defined in 40 CFR 63.2.		
b. This permit is issued based on the source not not being subject to the National Emission Standards for Hazardous Air Pollutants (NESHAP) for Miscellaneous Metal Parts and Products, 40 CFR 63 Subpart MMMM. This is a result of the federally enforceable production and operating limitations, which restrict the potential to emit to less than 10 tons/year for any individual Hazardous Air Pollutant (HAP) and 25 tons/year of any combination of such HAPs.		

- c. This permit is issued based on the Boiler at this source not being subject to the requirements of the National Emission Standard for Hazardous Air Pollutants (NESHAP) for Industrial, Commercial, and Institutional Boilers Area Sources, 40 CFR 63 Subpart JJJJJJ. Pursuant to 40 CFR 63.11195(e), gas-fired boilers are not subject to 40 CFT 63 Subpart JJJJJJ.
- d. This permit is issued based on the adhesive lines and the water-based coating lines and spray and dip operations at this source the National Emission Standard for Hazardous Air Pollutants (NESHAP) for Paint Stripping And Miscellaneous Surface Coating Operations At Area Sources, 40 CFR 63 Subpart HHHHHH because, the source is not involved in the spray application of coatings containing compounds of chromium (Cr), lead (Pb), manganese (Mn), nickel (Ni), or cadmium (Cd), collectively referred to as the target HAP to any part or product made of metal or plastic, or combinations of metal and plastic that are not motor vehicles or mobile equipment.
- 6a. This permit is issued based on the cleaning operations associated with the adhesive lines and the water-based coating lines and spray and dip operations at this source is not subject to 35 Ill. Adm. Code 218.187 (Other Industrial Solvent Cleaning Operations). Pursuant to 35 Ill. Adm. Code 218.187(a)(2)(B), notwithstanding 35 Ill. Adm. Code 218.187(a)(1): Cleaning operations for emission units within the miscellaneous industrial adhesives category shall be exempt from the requirements of 35 Ill. Adm. Code 218.187(b), (c), (d), (e), (f), and (g).
- b. Pursuant to 35 Ill. Adm. Code 218.900(b), notwithstanding 35 Ill. Adm. Code 218.900(a):
 - i. The requirements of 35 Ill. Adm. Code Part 218 Subpart JJ shall not apply to miscellaneous industrial adhesive application operations associated with aerospace coatings.
 - ii. The requirements of 35 Ill. Adm. Code 218.901(b) through (e) shall not apply to adhesives or adhesive primers used in the assembly, repair, or manufacture of aerospace or undersea-based weapon systems.
- c. This permit is issued based on the source not being subject to the requirements of 35 Ill. Adm. Code Part 218 Subpart PP (Miscellaneous Fabricated Product Manufacturing Processes). This is a result of the federally enforceable production and operating limitations of this permit, which restrict the maximum theoretical emissions of VOM to less than 100 tons/year and the potential to emit of VOM emissions to less than 25 tons per year.
- 7. Pursuant to 40 CFR 60.11(d), at all times, including periods of startup, shutdown, and malfunction, owners and operators shall, to the extent practicable, maintain and operate any affected facility including associated air pollution control equipment in a manner consistent with good air pollution control practice for minimizing

emissions. Determination of whether acceptable operating and maintenance procedures are being used will be based on information available to the Illinois EPA or USEPA which may include, but is not limited to, monitoring results, opacity observations, review of operating and maintenance procedures, and inspection of the source.

- 8a. Pursuant to 35 Ill. Adm. Code 218.901(e), the owner or operator of a source subject to 35 Ill. Adm. Code Part 218 Subpart JJ shall apply all miscellaneous industrial adhesives using one or more of the following methods:
- i. Electrostatic spray;
 - ii. High volume low pressure (HVLV) spray;
 - iii. Flow coating. For the purposes of 35 Ill. Adm. Code Part 218 Subpart JJ, flow coating means a non-atomized technique of applying coating to a substrate with a fluid nozzle with no air supplied to the nozzle;
 - iv. Roll coating or hand application, including non-spray application methods similar to hand or mechanically powered caulking gun, brush, or direct hand application;
 - v. Dip coating, including electrodeposition. For purposes of 35 Ill. Adm. Code Part 218 Subpart JJ, "electrodeposition" means a water-borne dip coating process in which opposite electrical charges are applied to the substrate and the coating. The coating is attracted to the substrate due to the electrochemical potential difference that is created;
 - vi. Airless spray;
 - vii. Air-assisted airless spray; or
 - viii. Another adhesive application method capable of achieving a transfer efficiency equal to or better than that achieved by HVLV spraying, if the method is approved in writing by the Illinois EPA.
- b. Pursuant to 35 Ill. Adm. Code 218.901(f), the owner or operator of a source subject to 35 Ill. Adm. Code Part 218 Subpart JJ shall comply with the following work practices for each subject miscellaneous adhesive application operation at the source:
- i. Store all VOM-containing adhesives, adhesive primers, process-related waste materials, cleaning materials, and used shop towels in closed containers;
 - ii. Ensure that mixing and storage containers used for VOM-containing adhesives, adhesive primers, process-related waste materials, and cleaning materials are kept closed at all times except when depositing or removing those materials;

- iii. Minimize spills of VOM-containing adhesives, adhesive primers, process-related waste materials, and cleaning materials;
 - iv. Convey VOM-containing adhesives, adhesive primers, process-related waste materials, and cleaning materials from one location to another in closed containers or pipes; and
 - v. Minimize VOM emissions from the cleaning of application, storage, mixing, and conveying equipment by ensuring that equipment cleaning is performed without atomizing the cleaning solvent and all spent solvent is captured in closed containers.
- 9a. 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.
- b. The RTO shall be in operation at all times when any of the four adhesive lines associated with the RTO are in operation and emitting air contaminants.
 - c. The Permittee shall, in accordance with the manufacturer(s) and/or vendor(s) recommendations, perform periodic maintenance on the regenerative thermal oxidizer (RTO) associated with the four adhesive lines (nutro spray booth tumbler, two screw cementers connected to one dryer, and one screw cementer connected to one dryer) such that the RTO is proper working condition and not cause a violation of the Illinois Environmental Protection Act or regulations promulgated therein.
 - d. The regenerative thermal oxidizer's (RTO) combustion chamber shall be preheated to at least the manufacturer's recommended temperature but no lower than the temperature at which compliance was demonstrated in the most recent compliance test, or 1500°F in the absence of a compliance test. This temperature shall be maintained during operation.
 - e. The regenerative thermal oxidizer (RTO) and the boiler shall only be operated with natural gas as the fuel. The use of any other fuel in the regenerative thermal oxidizer (RTO) or boiler requires that the Permittee first obtain a construction permit from the Illinois EPA and then perform stack testing to verify compliance with all applicable requirements.
- 10a. Emissions and operation of all natural gas-fired equipment at this source shall not exceed the following limits:
- i. Natural Gas Usage: 33 mmscf/month, 327 mmscf/year.
 - ii. Emissions from the combustion of natural gas:

<u>Pollutant</u>	<u>Emission Factor</u> (lb/mmscf)	<u>Emissions</u>	
		(Tons/Mo)	(Tons/Yr)
Carbon Monoxide (CO)	84.0	1.37	13.73
Nitrogen Oxide (NO _x)	100.0	1.64	16.35
Particulate Matter (PM)	7.6	0.12	1.24
Sulfur Dioxide (SO ₂)	0.6	0.01	0.10
Volatile Organic Material (VOM)	5.5	0.09	0.90

These limits are based on the maximum firing rate of the units combined, the maximum hours of operation, and standard emission factors (Tables 1.4-1 and 1.4-2, AP-42, Fifth Edition, Volume I, Supplement D, July 1998).

- b. Emissions and operation of the four adhesive lines controlled by RTO shall not exceed the following limits.
 - i. The RTO shall be operated to achieve at least 86% destruction of organic material emissions.
 - ii. The permanent total enclosure (PTE) installed on the adhesive lines shall meet the requirements of PTE, which are established in 35 Ill. Adm. Code 218, Appendix B, Procedure T. As a result, the capture efficiency of VOM on the adhesive lines is assumed to be 100 percent.
 - iii. VOM and HAP emissions from four adhesive lines controlled by RTO:

<u>Material</u>	<u>VOM Usage</u> (lb/Mo)	<u>HAP Usage</u> (lb/Mo)	<u>Emissions</u>			
			<u>VOM</u> (lb/Mo)	<u>(T/Yr)</u>	<u>HAP</u> (lb/Mo)	<u>(T/Yr)</u>
Adhesive	2,750	1,293	385	2.31	181	1.09
Solvent	8,870	4,435	1,242	7.45	621	3.73
Total:	11,620	5,728		9.76		4.82

These limits are based on material balance and an overall control efficiency of 86.0% (100% capture and 86.0% control).

Note: uncontrolled emissions for this equipment are limited to 69.72 tons per year VOM (11,620 x 12 / 2000 = 69.72).

- c. Emissions and operation of the uncontrolled adhesive lines, water-based coating lines, and Aerospace RACE Chemline/Spraybooth, and spray and dip operations shall not exceed the following limits:

<u>Material</u>	VOM Usage	VOM Emissions	
	<u>(lbs/Mo)</u>	<u>(Tons/Mo)</u>	<u>(Tons/Yr)</u>
Cements and Adhesives	1,383	0.69	8.3
Solvent-based Coating	100	0.05	0.6
Water-based Coating	120	0.10	0.8
Solvents	416	0.21	<u>2.5</u>
		Total:	<u>12.2</u>

- d. This permit is issued based upon negligible emissions of particulate matter from the spray booths controlled by fabric filter. For this purpose, emissions from all such sources shall not exceed nominal emission rates of 0.1 lb/hour and 0.44 tons/year.
- e. This permit is issued based upon negligible emissions of VOM from the mold cleaning tank, Boretite paint mixing and drumming operation, electric silicon oven, electric rubber ovens, and electric heat treat ovens. For this purpose, emissions shall not exceed nominal emission rates of 0.1 lb/hour from each emission unit and 2.0 tons/year from all such units combined.
- f. The emissions of Hazardous Air Pollutants (HAPs) as listed in Section 112(b) of the Clean Air Act from this 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, the NESHAP for Aerospace Manufacturing and Rework Facilities, 40 CFR 63 Subpart GG, and the NESHAP for Miscellaneous Metal Parts and Products, 40 CFR 63 Subpart MMMM.
- g. 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).
- 11a. Pursuant to 35 Ill. Adm. Code 201.282, every emission source or air pollution control equipment shall be subject to the following testing requirements for the purpose of determining the nature and quantities of specified air contaminant emissions and for the purpose of determining ground level and ambient air concentrations of such air contaminants:
 - i. Testing by Owner or Operator. The Illinois EPA may require the owner or operator of the emission source or air pollution control equipment to conduct such tests in accordance with procedures adopted by the Illinois EPA, at such reasonable times as may be specified by the Illinois EPA and at the expense of the owner or operator of the emission source or air pollution control equipment. The Illinois EPA may adopt procedures detailing methods of testing and formats for reporting results of testing. Such procedures and revisions thereto, shall not become effective until filed with the Secretary of State, as required by the APA Act. All such tests shall be made by or under the direction of a

person qualified by training and/or experience in the field of air pollution testing. The Illinois EPA shall have the right to observe all aspects of such tests.

- ii. Testing by the Illinois EPA. The Illinois EPA shall have the right to conduct such tests at any time at its own expense. Upon request of the Illinois EPA, the owner or operator of the emission source or air pollution control equipment shall provide, without charge to the Illinois EPA, necessary holes in stacks or ducts and other safe and proper testing facilities, including scaffolding, but excluding instruments and sensing devices, as may be necessary.
 - b. Testing required by Condition 12 shall be performed upon a written request from the Illinois EPA by a qualified independent testing service.
- 12a. Pursuant to 35 Ill. Adm. Code 218.902(a), testing to demonstrate compliance with the requirements of 35 Ill. Adm. Code Part 218 Subpart JJ shall be conducted by the owner or operator by May 1, 2012. Thereafter, testing shall be conducted within 90 days after a request by the Illinois EPA, or as otherwise provided in 35 Ill. Adm. Code Part 218 Subpart JJ. The testing shall be conducted at the expense of the owner or operator and the owner or operator shall notify the Illinois EPA in writing 30 days in advance of conducting the testing to allow the Illinois EPA to be present during testing.
- b. Pursuant to 35 Ill. Adm. Code 218.902(b), testing to demonstrate compliance with the VOM content limitations in 35 Ill. Adm. Code 218.901(b) shall be conducted as follows:
 - i. Method 24, shall be used for non-reactive adhesives. If it is demonstrated to the satisfaction of the Illinois EPA and the USEPA that plant adhesive formulation data are equivalent to Method 24 results, formulation data may be used. In the event of any inconsistency between a Method 24 test and a facility's formulation data, the Method 24 test will govern;
 - ii. Appendix A of 40 CFR 63, Subpart PPPP, shall be used for reactive adhesives.
 - iii. The manufacturer's specifications for VOM content for adhesives may be used if the specifications are based on results of tests of the VOM content conducted in accordance with methods specified in 35 Ill. Adm. Code 218.902(b)(1) and (b)(2), as applicable.
 - c. Pursuant to 35 Ill. Adm. Code 218.902(c), for afterburners and carbon adsorbers, the methods and procedures of 35 Ill. Adm. Code 218.105(d) through (f) shall be used for testing to demonstrate compliance with the requirements of 35 Ill. Adm. Code 218.901(d), as follows:
 - i. To select the sampling sites, Method 1 or 1A, as appropriate, 40 CFR 60, appendix A;

- ii. To determine the volumetric flow rate of the exhaust stream, Method 2, 2A, 2C, or 2D, as appropriate, 40 CFR 60, appendix A;
 - iii. To determine the VOM concentration of the exhaust stream entering and exiting the emissions control system, Method 25 or 25A, as appropriate, 40 CFR 60, appendix A. For thermal and catalytic afterburners, Method 25 must be used, except under the following circumstances, in which case Method 25A must be used:
 - A. The allowable outlet concentration of VOM from the emissions control system is less than 50 ppmv, as carbon;
 - B. The VOM concentration at the inlet of the emissions control system and the required level of control result in exhaust concentrations of VOM of 50 ppmv, or less, as carbon;
 - C. Due to the high efficiency of the emissions control system, the anticipated VOM concentration at the emissions control system exhaust is 50 ppmv or less, as carbon, regardless of inlet concentration. If the source elects to use Method 25A under this option, the exhaust VOM concentration must be 50 ppmv or less, as carbon, and the required destruction efficiency must be met for the source to have demonstrated compliance. If the Method 25A test results show that the required destruction efficiency apparently has been met, but the exhaust concentration is above 50 ppmv, as carbon, a retest is required. The retest shall be conducted using either Method 25 or 25A. If the retest is conducted using Method 25A and the test results again show that the required destruction efficiency apparently has been met, but the exhaust concentration is above 50 ppmv, as carbon, the source must retest using Method 25;
 - D. During testing, the cleaning equipment shall be operated at representative operating conditions and flow rates.
- 13a. Pursuant to 35 Ill. Adm. Code 218.903(a), if an afterburner is used to demonstrate compliance, the owner or operator of a source subject to 35 Ill. Adm. Code 218.901(d) shall:
- i. Install, calibrate, operate, and maintain temperature monitoring devices with an accuracy of 3°C or 5°F on the emissions control system in accordance with 35 Ill. Adm. Code 218.105(d)(2) and in accordance with the manufacturer's specifications. Monitoring shall be performed at all times when the emissions control system is operating; and
 - ii. Install, calibrate, operate and maintain, in accordance with manufacturer's specifications, a continuous recorder on the temperature monitoring devices, such as a strip chart, recorder or computer, with at least the same accuracy as the temperature monitor.

- 14a. Pursuant to 40 CFR 60.7(b), any owner or operator subject to the provisions of 40 CFR Part 60 shall maintain records of the occurrence and duration of any startup, shutdown, or malfunction in the operation of an affected facility; any malfunction of the air pollution control equipment; or any periods during which a continuous monitoring system or monitoring device is inoperative.
 - b. Pursuant to 40 CFR 60.7(f), any owner or operator subject to the provisions of 40 CFR Part 60 shall maintain a file of all measurements, including continuous monitoring system, monitoring device, and performance testing measurements; all continuous monitoring system performance evaluations; all continuous monitoring system or monitoring device calibration checks; adjustments and maintenance performed on these systems or devices; and all other information required by 40 CFR Part 60 recorded in a permanent form suitable for inspection. The file shall be retained for at least two years following the date of such measurements, maintenance, reports, and records.
- 15a.
 - i. Pursuant to 40 CFR 60.48c(g)(1), except as provided under 40 CFR 60.48c(g)(2) and (g)(3), the owner or operator of each affected facility shall record and maintain records of the amounts of each fuel combusted during each operating day.
 - ii. Pursuant to 40 CFR 60.48c(g)(2), as an alternative to meeting the requirements of 40 CFR 60.48c(g)(1), the owner or operator of an affected facility that combusts only natural gas, wood, fuels using fuel certification in 40 CFR 60.48c(f) to demonstrate compliance with the SO₂ standard, fuels not subject to an emissions standard (excluding opacity), or a mixture of these fuels may elect to record and maintain records of the amount of each fuel combusted during each calendar month.
 - iii. Pursuant to 40 CFR 60.48c(g)(2), as an alternative to meeting the requirements of 40 CFR 60.48c(g)(1), the owner or operator of an affected facility or multiple affected facilities located on a contiguous property unit where the only fuels combusted in any steam generating unit (including steam generating units not subject to 40 CFR 60 Subpart Dc) at that property are natural gas, wood, distillate oil meeting the most current requirements in 40 CFR 60.42c to use fuel certification to demonstrate compliance with the SO₂ standard, and/or fuels, excluding coal and residual oil, not subject to an emissions standard (excluding opacity) may elect to record and maintain records of the total amount of each steam generating unit fuel delivered to that property during each calendar month.
 - b. Pursuant to 40 CFR 60.48c(i), all records required under 40 CFR 60.48 shall be maintained by the owner or operator of the affected facility for a period of two years following the date of such record.
16. 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.

- 17a. Pursuant to 35 Ill. Adm. Code 218.904(b)(4), all sources subject to the requirements of 35 Ill. Adm. Code Part 218 Subpart JJ shall retain all records required by 35 Ill. Adm. Code 218.904 for at least three years and make those records available to the Illinois EPA upon request.
- b. Pursuant to 35 Ill. Adm. Code 218.904(c)(2), The owner or operator of an adhesive application operation subject to the limitations of 35 Ill. Adm. Code 218.901 and complying by means of 35 Ill. Adm. Code 218.901(b) shall comply with the following: Collect and record the name, identification number, and VOM content of each adhesive as applied each day by each adhesive application operation complying with 35 Ill. Adm. Code 218.901(b).
- c. Pursuant to 35 Ill. Adm. Code 218.904(e)(3), the owner or operator of an adhesive application operation subject to the requirements of 35 Ill. Adm. Code 218.901 and complying by means of 35 Ill. Adm. Code 218.901(d) shall collect and record daily the following information for each adhesive application operation subject to the requirements of 35 Ill. Adm. Code 218.901(d):
 - i. Afterburner or other approved control device monitoring data in accordance with 35 Ill. Adm. Code 218.903;

- ii. A log of operating time for the afterburner or other approved control device, monitoring equipment, and the associated application unit; and
 - iii. A maintenance log for the afterburner or other approved control device and monitoring equipment detailing all routine and non-routine maintenance performed, including dates and duration of any outages.
- 18a. The Permittee shall maintain records of the following items so as to demonstrate compliance with the conditions of this permit:
- i. Natural gas usage (mmscf/month and mmscf/year);
 - ii. For the adhesive lines connected to the RTO:
 - A. Adhesive usage and solvent usage (gallons/month and gallons/year);
 - B. VOM and HAP content of adhesives and solvents (lbs/gallon or wt. percent);
 - C. Adhesive VOM usage and solvent VOM usage (lbs/month and tons/year);
 - D. Adhesive HAP usage and solvent HAP usage (lbs/month and tons/year);
 - iii. For the RTO:
 - A. Records for periodic inspection of the RTO with date, individual performing the inspection, and nature of inspection; and
 - B. Records for prompt repair of defects, with identification and description of defect, effect on emissions, date identified, date repaired, and nature of repair.
 - iv. For the uncontrolled adhesive lines, water-based coating lines and spray and dip operations:
 - A. Usage of each material (gallons/month and gallons/year);
 - B. VOM and HAP content of each material used (lbs/gallon or wt. percent)
 - C. VOM usage of each material (lbs/month and tons/year); and
 - v. Monthly and annual emissions of CO, NO_x, PM, SO₂, VOM and HAPS from the source with supporting calculations (tons/month and tons/year).

- 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 storage device) 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.
19. Pursuant to 40 CFR 60.7(a)(4), any owner or operator subject to the provisions of 40 CFR Part 60 shall furnish the Illinois EPA or USEPA written notification or, if acceptable to both the Illinois EPA and USEPA and the owner or operator of a source, electronic notification, as follows: A notification of any physical or operational change to an existing facility which may increase the emission rate of any air pollutant to which a standard applies, unless that change is specifically exempted under an applicable subpart or in 40 CFR 60.14(e). This notice shall be postmarked 60 days or as soon as practicable before the change is commenced and shall include information describing the precise nature of the change, present and proposed emission control systems, productive capacity of the facility before and after the change, and the expected completion date of the change. The Illinois EPA or USEPA may request additional relevant information subsequent to this notice.
- 20a. Pursuant to 35 Ill. Adm. Code 218.904(b), all sources subject to the requirements of 35 Ill. Adm. Code Part 218 Subpart JJ shall:
- i. At least 30 calendar days before changing the method of compliance in accordance with 35 Ill. Adm. Code 218.901(b), (c), and (d), notify the Illinois EPA in writing of the change. The notification shall include a demonstration of compliance with the newly applicable subsection;
 - ii. Notify the Illinois EPA in writing of any violation of the requirements of 35 Ill. Adm. Code Part 218 Subpart JJ within 30 days following the occurrence of the violation and provide records documenting the violation upon request by the Illinois EPA;
- b. Pursuant to 35 Ill. Adm. Code 218.904(e)(2), the owner or operator of an adhesive application operation subject to the requirements of 35 Ill. Adm. Code 218.901 and complying by means of 35 Ill. Adm. Code 218.901(d) shall within 90 days after conducting testing pursuant to 35 Ill. Adm. Code 218.902, submit to the Illinois EPA a copy of all test results, as well as a certification that includes the following:
- i. A declaration that all tests and calculations necessary to demonstrate whether the adhesive application operations are in compliance with 35 Ill. Adm. Code 218.901(d) have been properly performed;
 - ii. A statement whether the adhesive application operations are or

are not in compliance with 35 Ill. Adm. Code 218.901(d); and

- iii. The operating parameters of the afterburner or other approved control device during testing, as monitored in accordance with 35 Ill. Adm. Code 218.903;
 - c. Pursuant to 35 Ill. Adm. Code 218.990, upon request by the Illinois EPA, the owner or operator of an emission unit which is exempt from the requirements of 35 Ill. Adm. Code 218 Subparts PP, QQ, RR, TT or 35 Ill. Adm. Code 218.208(b) shall submit records to the Illinois EPA within 30 calendar days from the date of the request that document that the emission unit is exempt from those requirements.
- 21a. 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.
- b. 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 Illinois EPA's regional office at the following address unless otherwise indicated:

Illinois Environmental Protection Agency
Division of Air Pollution Control
9511 West Harrison
Des Plaines, Illinois 60016

If you have any questions on this, please call German Barria at 217/785-1705.

Raymond E. Pilapil
Acting Manager, Permit Section
Division of Air Pollution Control

Date Signed: _____

REP: GB:

cc: Illinois EPA, FOS Region 1
Lotus Notes

Attachment A - Emission Summary

This attachment provides a summary of the maximum emissions from the sealing and aerospace products manufacturing operation operating in compliance with the requirements of this federally enforceable permit. In preparing this summary, Illinois EPA used the annual operating scenario which results in maximum emissions from such a plant. The resulting maximum emissions are well below the levels (e.g., 100 tons/year for VOM, 10 tons/year for any single HAP, and 25 tons/year for any combination of such HAP) 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>Emission Unit</u>	E M I S S I O N S (Tons/Year)						Single <u>HAP</u>	Combined <u>HAPs</u>
	<u>CO</u>	<u>NO_x</u>	<u>PM</u>	<u>SO₂</u>	<u>VOM</u>			
Natural Gas Combustion	13.73	16.35	1.24	0.10	0.90			
Four Adhesive Lines w/RTO					9.76	4.82	4.82	
Uncontrolled Adhesive Lines, Water-Based Coating Lines, and Aerospace RACE Chemline/Spraybooth, and Spray and Dip Operations			0.44		12.20			
Mold Cleaning Tank, Boretite Paint Mixing and Drumming Operation, Electric Silicon Oven, Electric Rubber Ovens, Electric Heat Treat Ovens	--	--	--	--	2.00	--	--	
Totals:	13.73	16.35	1.68	0.10	24.86	9.0	22.5	

GB: