

217/782-2113

FEDERALLY ENFORCEABLE STATE OPERATING PERMIT -- REVISED

PERMITTEE

Forbo Adhesives LLC
Attn: Joaquin Herrera, Plant Manager
6352 East Collins Road
Morris, Illinois 60450

<u>Application No.:</u> 02040063	<u>I.D. No.:</u> 063806AAL
<u>Applicant's Designation:</u>	<u>Date Received:</u> January 14, 2010
<u>Subject:</u> Manufacturing of Polyurethane Adhesives	
<u>Date Issued:</u> April 1, 2010	<u>Expiration Date:</u> May 6, 2013
<u>Location:</u> 6352 East Collins Road, Morris, Grundy County, 60450	

Permit is hereby granted to the above-designated Permittee to OPERATE emission source(s) and/or air pollution control equipment consisting of:

Four (4) Blend Tanks/Reactors (T-204/R-301, T-205/R-302, T-206/R-303, and T-207/R-304) controlled by Regenerative Thermal Oxidizer (PUR-RTO);
One (1) Reactor (R-305) controlled by Regenerative Thermal Oxidizer (PUR-RTO);
One (1) 1,500 Gallon Dirty Solvent Tank (T-410) controlled by Regenerative Thermal Oxidizer (PUR-RTO);
One (1) 1,500 Gallon Clean Solvent Tank (CST 1500) controlled by Regenerative Thermal Oxidizer (PUR-RTO);
One (1) Solvent Distillation Vessel;
Two (2) MDI Storage Tanks (T-203 and T-204a);
One (1) Overflow Tank (T-212); and
Two (2) Polyol Storage Tanks (T-201 and T-202)

as described in 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 emissions from the source to less than major source thresholds, (i.e., to less than 100 tons per year of NO_x, SO₂, and VOM, 10 tons/year for a single HAP and 25 tons per year of any combination of such HAPs), as further described in Attachment A. As a result, the source is excluded from the requirement to obtain a Clean Air Act Permit Program (CAAPP) permit.
 - ii. To establish federally enforceable production and operating limitations, which restrict a 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 Miscellaneous Organic Chemical Manufacturing, 40 CFR 63 Subpart FFFF.

- iii. To establish federally enforceable Emission Reduction Market System (ERMS) provisions, including baseline emissions, allotment for each seasonal allotment period, identification of any units deemed to be insignificant activities for the purposes of the ERMS, emissions calculation methodologies, and provisions addressing all other applicable requirements of 35 Ill. Adm. Code Part 205, which are described in Attachment B.
 - b. For purposes of this FESOP, Forbo Adhesives LLC is considered a single source with Reichhold, Inc. (Reichhold), I.D. No. 063806AAA, located at 6350 East Collins Road, Morris. The source has elected to obtain separate FESOPs for these locations.
 - c. Prior to the initial issuance of this permit, a draft of this permit has undergone a public notice and comment period.
 - d. This permit supersedes all operating permits issued for this location.
- 2a. 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 212.301, no person shall cause or allow the emission of fugitive particulate matter from any process, including any material handling or storage activity, that is visible by an observer looking generally toward the zenith at a point beyond the property line of the source.
 - d. 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).
3. Pursuant to 35 Ill. Adm. Code 214.301, except as further provided by 35 Ill. Adm. Code Part 214, no person shall cause or allow the emission of sulfur dioxide into the atmosphere from any process emission unit to excess 2,000 ppm.

- 4a. Pursuant to 35 Ill. Adm. Code 218.122(a), no person shall cause or allow the discharge of more than 3.6 kg/hour (8 lbs/hour) of organic material into the atmosphere during the loading of any organic material from the aggregate loading pipes of any loading facility having through-put of greater than 151 cubic meters per day (40,000 gallons/day) into any railroad tank car, tank truck or trailer unless such loading facility is equipped with submerged loading pipes, submerged fill, or a device that is equally effective in controlling emissions and is approved by the Illinois EPA according to the provisions of 35 Ill. Adm. Code 201.
- b. Pursuant to 35 Ill. Adm. Code 218.122(b), no person shall cause or allow the loading of any organic material into any stationary tank having a storage capacity of greater than 946 liters (250 gallons), unless such tank is equipped with a permanent submerged loading pipe, submerged fill, or an equivalent device approved by the Illinois EPA according to the provisions of 35 Ill. Adm. Code 201 or unless such tank is a pressure tank as described in Section 218.121(a) or is fitted with a recovery system as described in 35 Ill. Adm. Code 218.121(b)(2).
- c. Pursuant to 35 Ill. Adm. Code 218.301, 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 218.302, 218.303, 218.304 and the following exception: If no odor nuisance exists the limitation of 35 Ill. Adm. Code 218 Subpart G shall apply only to photochemically reactive material.
- d. Pursuant to 35 Ill. Adm. Code 218.302(b), 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.
- e. Pursuant to 35 Ill. Adm. Code 218.500(a)(1), the control requirements set forth in 35 Ill. Adm. Code 218.501 shall apply to process vents associated with batch operations at sources identified by any of the following four-digit standard industrial classification ("SIC") codes, as defined in the 1987 edition of the Federal Standard Industrial Classification Manual: SIC 2821, 2833, 2834, 2861, 2865, 2869, and 2879.
- f. Pursuant to 35 Ill. Adm. Code 218.501(a), every owner or operator of a single unit operation with an average flow rate, as determined in accordance with 35 Ill. Adm. Code 218.502(b), below the flow rate value calculated by the applicability equations contained in 35 Ill. Adm. Code 218.500(e), shall reduce uncontrolled VOM emissions from such single unit operation by an overall efficiency, on average, at least 90 percent, or 20 ppmv, per batch cycle.
- g. Pursuant to 35 Ill. Adm. Code 218.501(b) every owner or operator of a batch process train with an average flow rate, as determined in accordance with 35 Ill. Adm. Code 218.502(b)(2), below the flow rate value calculated by the applicability equations contained in 35 Ill.

Adm. Code 218.500(e), shall reduce uncontrolled VOM emissions from such batch process train by an overall efficiency, on average, of at least 90 percent, or 20 ppmv, per batch cycle. For purposes of demonstrating compliance with the emission limitations set forth in 35 Ill. Adm. Code 218.501, any control device meeting the criteria in 35 Ill. Adm. Code 218.501(c) shall be deemed to achieve a control efficiency of 90 percent, or 20 ppmv, per batch cycle, as applicable.

5. This permit is issued based on the source not being subject to the NSPS for Volatile Organic Compound (VOC) Emissions from the Polymer Manufacturing Industry, 40 CFR 60 Subpart DDD. Pursuant to 40 CFR 60.560(a), the provisions of 40 CFR 60 Subpart DDD apply to affected facilities involved in the manufacture of polypropylene, polyethylene, polystyrene, or poly (ethylene terephthalate) as defined in 40 CFR 60.561.
6. This permit is issued based upon the source not being subject to the National Emission Standards for Hazardous Air Pollutants (NESHAP) for Miscellaneous Organic Chemical Manufacturing, 40 CFR 63 Subpart FFFF. This is consequence 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.
7. Pursuant to 35 Ill. Adm. Code 212.314, 35 Ill. Adm. Code 212.301 shall not apply and spraying pursuant to 35 Ill. Adm. Code 212.304 through 212.310 and 35 Ill. Adm. Code 212.312 shall not be required when the wind speed is greater than 40.2 km/hour (25 mph). Determination of wind speed for the purposes of this rule shall be by a one-hour average or hourly recorded value at the nearest official station of the U.S. Weather Bureau or by wind speed instruments operated on the site. In cases where the duration of operations subject to this rule is less than one hour, wind speed may be averaged over the duration of the operations on the basis of on-site wind speed instrument measurements.
- 8a. Pursuant to 35 Ill. Adm. Code 218.119, the limitations of 35 Ill. Adm. Code 218.120 shall apply to all storage containers of volatile organic liquid (VOL) with a maximum true vapor pressure of 0.5 psia or greater in any stationary tank, reservoir, or other container of 151 cubic meters (40,000 gallon) capacity or greater.
- b. Pursuant to 35 Ill. Adm. Code 218.122(c) if no odor nuisance exists the limitations of 35 Ill. Adm. Code 218.122 shall only apply to the loading of VOL with a vapor pressure of 17.24 kPa (2.5 psia) or greater at 294.3°K (70°F).
- c. The source is not subject to 35 IAC 218 Subpart Q (Leaks from Synthetic Organic Chemical and Polymer Manufacturing Plants). 35 IAC 218 Subpart Q, does not apply because none of the synthetic organic chemicals listed in Appendix A of 35 Ill. Adm. Code Part 218 are manufactured at this source.
- d. Pursuant to 35 Ill. Adm. Code 218.500(c), the following single unit operations and batch process trains are subject to 35 Ill. Adm. Code

218 Subpart V but are considered to be de minimis and are, therefore, exempt from the control requirements of 35 Ill. Adm. Code 218.501. However, the recordkeeping and reporting requirements in 35 Ill. Adm. Code 218.505 shall apply to such de minimis single unit operations and batch process trains:

- i. Within a batch operation, any single unit operation with uncontrolled total annual mass emissions of less than or equal to 500 lbs/year of VOM. Such single unit operations are also excluded from the calculation of the total annual mass emissions for a batch process train. If the uncontrolled total annual mass emissions from such exempt single unit operation exceed 500 lbs/year of VOM in any subsequent year, the source shall calculate applicability in accordance with 35 Ill. Adm. Code 218.500(d) for both the individual single unit operation and the batch process train containing the single unit operation; and
 - ii. Any batch process train containing process vents that have, in the aggregate, uncontrolled total annual mass emissions, as determined in accordance with 35 Ill. Adm. Code 218.502(a), of less than 30,000 lbs/year of VOM for all products manufactured in such batch process train.
- e. Pursuant to 35 Ill. Adm. Code Part 218.500(d), the applicability equations in 35 Ill. Adm. Code 218.500(e), which require the calculation of uncontrolled total annual mass emissions and flow rate value, shall be used to determine whether a single unit operation or a batch process train is subject to the control requirements set forth in 35 Ill. Adm. Code 218.501. The applicability equation shall be applied to the following:
- i. Any single unit operation with uncontrolled total annual mass emissions that exceed 500 lb/yr and with a VOM concentration greater than 500 ppmv. In this individual determination, no applicability analysis shall be performed for any single unit operation with a VOM concentration of less than or equal to 500 ppmv; and
 - ii. Any batch process train containing process vents which, in the aggregate, have uncontrolled total annual mass emissions of 30,000 lb/yr or more of VOM from all products manufactured in the batch process train. Any single unit operation with uncontrolled total annual mass emissions exceeding 500 lb/yr, regardless of VOM concentration, shall be included in the aggregate applicability analysis.
- f. This permit is issued based on the source not being subject to the control requirements of 35 Ill. Adm. Code 218 Subpart RR (Miscellaneous Organic Chemical Manufacturing Processes). The VOM emissions from the source's process emission units not regulated by 35 Ill. Adm. Code Subparts B, E, F, H, Q, R, S, T, V, X, Y, Z or BB do not exceed the thresholds specified in 35 Ill. Adm. Code 218.960(a)(1)(A) and 35 Ill. Adm. Code 218.960(b)(1)(A) and (B).

- 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 nuisance.
- b. The regenerative thermal oxidizer's (RTO) combustion chambers shall be preheated to at least the manufacturer's recommended temperature but no less than the temperature at which compliance was demonstrated in the most recent compliance test, or 1400°F in the absence of a compliance test. This temperature shall be maintained during operation.
- c. The Permittee shall, in accordance with the manufacturer(s) and/or vendor(s) recommendations, perform periodic maintenance on the regenerative thermal oxidizer (RTO) such that the regenerative thermal oxidizer (RTO) be kept in proper working condition and not cause a violation of the Illinois Environmental Protection Act or regulations promulgated therein.
- d. The regenerative thermal oxidizer (RTO) shall only be operated with natural gas as the fuel. The use of any other fuel in the regenerative thermal oxidizer (RTO) 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 the polyurethane plant process reactors/blend tanks shall not exceed the following limits:

i. Polyurethane Plant Production:

<u>Item of Equipment</u>	<u>Polyurethane Production</u>	
	<u>(Batches/Month)</u>	<u>(Batches/Year)</u>
Reactor/Blend Tank T-204/R-301	73	730
Reactor/Blend Tank T-205/R-302	73	730
Reactor/Blend Tank T-206/R-303	73	730
Reactor/Blend Tank T-207/R-304	73	730
Reactor R-305	73	730

ii. Emissions of volatile organic material (VOM) from the Polyurethane Plant shall not exceed the following:

<u>Item of Equipment</u>	<u>VOM Emissions</u>		
	<u>(lbs/Batch)</u>	<u>(Lbs/Month)</u>	<u>(Tons/Year)</u>
Reactor/Blend Tank T-204/R-301	15.492	56.55	0.28
Reactor/Blend Tank T-205/R-302	20.105	73.38	0.37
Reactor/Blend Tank T-206/R-303	10.288	37.55	0.19
Reactor/Blend Tank T-207/R-304	19.488	71.13	0.36
Reactor R-305	43.100	157.32	0.79
		Total:	1.99

iii. Emissions of hazardous air pollutants (HAP) from the Polyurethane Plant shall not exceed the following:

<u>Item of Equipment</u>	<u>Toluene</u>		<u>Combined HAPs*</u>		
	<u>(lbs/Batch)</u>	<u>(lbs/Mo)</u>	<u>(Tons/Yr)</u>	<u>(lbs/Batch)</u>	<u>(lbs/Mo)</u>

Item of Equipment	Toluene			Combined HAPs*		
	(lbs/Batch)	(lbs/Mo)	(Tons/Yr)	(lbs/Batch)	(lbs/Mo)	(Tons/Yr)
T-204/R-301	15.06	54.97	0.27	15.170	55.37	0.28
T-205/R-302	19.50	71.18	0.36	19.531	71.29	0.36
T-206/R-303	10.00	36.50	0.18	10.073	36.76	0.18
T-207/R-304	19.20	70.08	0.35	19.273	70.34	0.35
R-305	42.10	153.67	0.77	42.351	154.57	0.77
		Totals:	1.93			1.94

* Includes ethlybenzene, MDI, toluene, and xylene.

iv. These limits are based on maximum production rates, 95% overall control efficiency of the RTO, and emission factors developed using standard emission calculations (EIIIP Volume II: Chapter 8 Methods for Estimating Air Emissions from Paint, Ink, and Other Coating Manufacturing Facilities and Chapter 16 Methods for Estimating Air Emissions From Chemical Manufacturing Facilities).

b. Emissions and operation of the tanks shall not exceed the following limits:

Tank	Throughput		VOM Emissions		Toluene Emissions	
	(Gal/Mo)	(Gal/Yr)	(lbs/Mo)	(Tons/Yr)	(lbs/Mo)	(Tons/Yr)
Dirty Solvent	61,500	615,000	27.4	0.14	27.4	0.14
Clean Solvent	61,500	615,000	3.0	0.02	3.0	0.02
			Totals:	0.16		0.16

These limits are based on the maximum throughput of the above tanks, the material stored in the tanks, the maximum annual emission rate determined by the use of the TANKS Program (Version 4.09D, February 5, 2008), and 95% overall control efficiency of the RTO.

c. Emissions and operation of the regenerative thermal oxidizer (RTO) shall not exceed the following limits:

i. Natural Gas Usage:

Emission Unit	(mmscf/Month)	(mmscf/Year)
Regenerative Thermal Oxidizer (RTO)	38.690	464.28

ii. Emissions from the combustion of natural gas:

Item of Equipment	CO		NO _x		PM		SO ₂		VOM	
	(T/Mo)	(T/Yr)	(T/Mo)	(T/Yr)	(T/Mo)	(T/Yr)	(T/Mo)	(T/Yr)	(T/Mo)	(T/Yr)
RTO	0.04	0.42	0.04	0.50	0.01	0.04	0.01	0.01	0.00	0.03

These limits are based on the maximum fuel use and standard emission factors (Tables 1.4-1, 1.4-2, AP-42, Fifth Edition, Volume I, Supplement D, July 1998).

d. This permit is issued based on negligible emissions of volatile organic materials from the Solvent Distillation Vessel, MDI Storage Tanks T-203 and T-204a, Overflow Tank T-212, and Polyol Storage Tanks T-201 and T-202. For this purpose emissions of each pollutant from each emission

unit shall not exceed nominal emission rate of 0.1 lbs/hour and 0.44 tons/year.

- e. 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 months 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 Conditions 12 and 13 shall be performed upon a written request from the Illinois EPA by a qualified independent testing service.
- 12. Pursuant to 35 Ill. Adm. Code 212.110(c), 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.
- 13a. Pursuant to 35 Ill. Adm. Code 218.503(a), upon the Illinois EPA's request, the owner or operator of a batch operation shall conduct testing to demonstrate compliance with 35 Ill. Adm. Code 218.501. The

owner or operator shall, at its own expense, conduct such tests in accordance with the applicable test methods and procedures specified in 35 Ill. Adm. Code 218.503(d), (e), and (f).

- b. Pursuant to 35 Ill. Adm. Code 218.503(d), the owner or operator of a batch operation that is exempt from the control requirements of 35 Ill. Adm. Code 218.501 shall demonstrate, upon the Illinois EPA's request, the absence of oversized gas moving equipment in any manifold. Gas moving equipment shall be considered oversized if it exceeds the maximum requirements of the exhaust flow rate by more than 30 percent.
- c. Pursuant to 35 Ill. Adm. Code 218.503(e), for the purpose of demonstrating compliance with the control requirements in 35 Ill. Adm. Code 218.501, the batch operation shall be run at representative operating conditions and flow rates during any performance test.
- d. Pursuant to 35 Ill. Adm. Code 218.503(f), the following methods in 40 CFR 60, Appendix A, incorporated by reference at 35 Ill. Adm. Code 218.112, shall be used to demonstrate compliance with the reduction efficiency requirement set forth in 35 Ill. Adm. Code 218.501:
 - i. Method 1 or 1A, as appropriate, for selection of the sampling sites if the flow measuring device is not a rotameter. The control device inlet sampling site for determination of vent stream VOM composition reduction efficiency shall be prior to the control device and after the control device;
 - ii. Method 2, 2A, 2C, or 2D, as appropriate, for determination of gas stream volumetric flow rate flow measurements, which shall be taken continuously. No traverse is necessary when the flow measuring device is an ultrasonic probe;
 - iii. Method 25A or Method 18, if applicable, to determine the concentration of VOM in the control device inlet and outlet;
 - A. The sampling time for each run shall be as follows:
 - I. For batch cycles less than eight hours in length, readings shall be taken continuously over the entire length of the batch cycle with a maximum of 15-minute intervals between measurements if using Method 25A. If using Method 18, readings shall be taken continuously with a maximum of 15-minute intervals between measurements throughout the batch cycle unless it becomes necessary to change the impinger train, in which case a 30-minute interval shall not be exceeded.
 - II. For batch cycles of eight hours and greater in length, the owner or operator may either test in accordance with the test procedures defined in 35 Ill. Adm. Code 218.503(f)(3)(A)(i) or the owner or operator may elect to perform tests, pursuant to either Method 25A or Method 18, only during those

portions of each emission event which define the emission profile of each emission event occurring within the batch cycle. For each emission event of less than four hours in duration, the owner or operator shall test continuously over the entire emission event as set forth in 35 Ill. Adm. Code 218.503(f)(3)(A)(i). For each emission event of greater than four hours in duration, the owner or operator shall elect either to perform a minimum of three one hour test runs during the emission event or shall test continuously over the entire emission event within each single unit operation in the batch process train. To demonstrate that the portion of the emission event to be tested define the emission profile for the emission event, the owner or operator electing to rely on this option shall develop an emission profile for the entire emission event. Such emission profile shall be based upon either process knowledge or test data collected. Examples of information that could constitute process knowledge include, but are not limited to, calculations based on material balances and process stoichiometry. Previous test results may be used provided such results are still relevant to the current process vent stream conditions.

III. For purposes of 35 Ill. Adm. Code 218.503(f)(3), the term "emission event" shall be defined as a discrete period of venting that is associated with a single unit operation. For example, a displacement of vapor resulting from the charging of a single unit operation with VOM will result in a discrete emission event that will last through the duration of the charge and will have an average flow rate equal to the rate of the charge. The expulsion of expanded single unit operation vapor space when the vessel is heated is also an emission event. Both of these examples of emission events and others may occur in the same single unit operation during the course of the batch cycle. If the flow rate measurement for any emission event is zero, in accordance with 35 Ill. Adm. Code 218.503(f)(2), then such event is not an emission event for purposes of 35 Ill. Adm. Code 218.503.

- B. The mass emission rate from the process vent or inlet to the control device shall be determined by combining concentration and flow rate measurements taken simultaneously at sampling sites selected in accordance with 35 Ill. Adm. Code 218.503(f)(1) throughout the batch cycle;
- C. The mass emission rate from the control device outlet shall be obtained by combining concentration and flow rate

measurements taken simultaneously at sampling sites selected in accordance with 35 Ill. Adm. Code 218.503(f)(1) throughout the batch cycle; and

- D. The efficiency of the control device shall be determined by integrating the mass emission rates obtained in 35 Ill. Adm. Code 218.503(f)(3)(B) and (f)(3)(C), over the time of the batch cycle and dividing the difference in inlet and outlet mass flow totals by the inlet mass flow total.
 - e. Pursuant to 35 Ill. Adm. Code 218.503(i), in the absence of a request by the Illinois EPA to conduct performance testing in accordance with the provisions of 35 Ill. Adm. Code 218.503, a source may demonstrate compliance by the use of engineering estimates or process stoichiometry.
14. Pursuant to 35 Ill. Adm. Code 218.504(a)(2), every owner or operator using an afterburner to comply with 35 Ill. Adm. Code 218.501 shall install, calibrate, maintain and operate, according to manufacturer's specifications, temperature monitoring devices with an accuracy of ± 1 percent of the temperature being measured expressed in degrees Celsius, equipped with continuous recorders. Where an afterburner other than a catalytic afterburner is used, a temperature monitoring device shall be installed in the combustion chamber.
15. 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.

16. 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.
- 17a. Pursuant to 35 Ill. Adm. Code 218.129(f), the owner or operator of each storage vessel specified 35 Ill. Adm. Code 218.119 shall maintain readily accessible records of the dimension of the storage vessel and an analysis of the capacity of the storage vessel. Each storage vessel with a design capacity less than 40,000 gallons is subject to no provisions of this Part other than those required by maintaining readily accessible records of the dimensions of the storage vessel and analysis of the capacity of the storage vessel.
- b. Pursuant to 35 Ill. Adm. Code 218.505(a), every owner or operator of a de minimis single unit operation or batch process train exempt under 35 Ill. Adm. Code 218.500(c)(1) or (c)(2) shall keep records of the uncontrolled total annual mass emissions for any de minimis single unit operation or batch process train, as applicable, and documentation verifying these values or measurements. The documentation shall include the engineering calculations, any measurements made in accordance with 35 Ill. Adm. Code 218.503, and the potential or permitted number of batch cycles per year, or, in the alternative, total production as represented in the source's operating permit.
- c. Pursuant to 35 Ill. Adm. Code 218.505(b), every owner or operator of a single unit operation exempt under 35 Ill. Adm. Code 218.500 (b) (3) or (d) shall keep the following records:
 - i. The uncontrolled total annual mass emissions and documentation verifying these values or measurements. The documentation shall include any engineering calculations, any measurements made in accordance with 35 Ill. Adm. Code 218.503, and the potential or permitted number of batch cycles per year, or, in the alternative, total production as represented in the source's operating permit.
 - ii. The average flow rate in scfm and documentation verifying this value.
- d. Pursuant to 35 Ill. Adm. Code 218.505(c)(1), every owner or operator of a batch operation subject to the control requirements of 35 Ill. Adm. Code 218.501 shall keep records of the following parameters required to be monitored under 35 Ill. Adm. Code 218.504. If using a thermal or catalytic afterburner to comply with 35 Ill. Adm. Code 218.501, records indicating the average combustion chamber temperature of the afterburner (or the average temperature upstream and downstream of the catalyst bed for a catalytic afterburner), measured continuously and averaged over the same time period as the performance test;
- e. Pursuant to 35 Ill. Adm. Code 218.505(d), every owner or operator of a single unit operation claiming a vent stream concentration exemption

level, as set forth in 35 Ill. Adm. Code 218.500(d)(1), shall maintain records to indicate the vent stream concentration is less than or equal to 500 ppmv.

- f. Pursuant to 35 Ill. Adm. Code 218.505(h), every owner or operator of a batch operation required to keep records under 35 Ill. Adm. Code 218.505 shall maintain such records at the source for a minimum period of three years and shall make all such records available to the Illinois EPA upon request.
- 18a. The Permittee shall maintain records of the following items so as to demonstrate compliance with the conditions of this permit:
- i. The Permittee shall maintain the following records to allow the confirmation of actual VOM emissions during the seasonal allotment period:
 - A. Records of operating data and other information for each individual emission unit or group of related emission units at the source, as appropriate, to determine actual VOM emissions during the seasonal allotment period;
 - B. Records of the VOM emissions, in tons, during the seasonal allotment period, with supporting calculations, for each individual emission unit or group of related emission units at the source, determined in accordance with the procedures that may be specified in this permit; and
 - C. Total VOM emissions from the source, in tons, during each seasonal allotment period, which shall be compiled by November 30 of each year.
 - ii. Records addressing use of good operating practices for the regenerative thermal oxidizer:
 - A. Records for periodic inspection of the regenerative thermal oxidizer 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.
 - iii. For each storage tank and each loading rack:
 - A. Names and identification number of materials transferred and/or stored;
 - B. Material throughput (gallons/month, gallons/year); and
 - C. Material true vapor pressure.
 - iv. Polyurethane production of each reactor/blend tank (batches/month and batches/year);

- v. Dirty and clean solvent tank throughput (gallons/month (each tank) and gallons/year (each tank));
 - vi. Natural gas consumption for the regenerative thermal oxidizer (mmscf/month and mmscf/year); and
 - vii. Monthly and annual CO, NO_x, PM, SO₂ VOM and HAP emissions from the source with supporting calculations (tons/month, 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 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.
- 20a. Pursuant to 35 Ill. Adm. Code 218.505(d), every owner or operator of a single unit operation claiming a vent stream concentration exemption level, as set forth in 35 Ill. Adm. Code 218.500(d)(1), shall notify the Illinois EPA in writing if the vent stream concentration at any time equals or exceeds 500 ppmv, within 60 days after such event. Such notification shall include a copy of all records of such event.
- b. Pursuant to 35 Ill. Adm. Code 218.505(g), the owner or operator of a de minimis single unit operation or batch process train exempt from the control requirements of 35 Ill. Adm. Code 218.500(c) shall notify the Illinois EPA in writing if the uncontrolled total annual mass emissions from such de minimis single unit operation or batch process train exceed the threshold in 35 Ill. Adm. Code 218.500(c)(1) or (c)(2), respectively, within 60 days after the event occurs. Such notification shall include a copy of all records of such event.
- 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 record 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 the 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

It should be noted that the provisions of 35 Ill. Adm. Code 201 Subpart F (CAAPP Permits), specifically 35 Ill. Adm. Code 201.210 (Categories of Insignificant Activities or Emission Levels) does not apply to sources excluded from Section 39.5 of the Illinois Environmental Protection Act (Act) under Section 39.5(1.1) of the Act.

It should be noted that this permit has been revised so as to include the operating of equipment described in Construction permit 10010008.

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

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

Date Signed: _____

ECB:JRS:jws

cc: Illinois EPA, FOS Region 1
Lotus Notes

Attachment A - Emissions Summary

This attachment provides a summary of the maximum emissions from the Polyurethane Adhesives Manufacturing 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. The resulting maximum emissions are below the levels, (e.g., 100 tons per year of NO_x, SO₂, and VOM, 10 tons per year for a single HAP, and 25 tons per year for totaled 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.

a. Reichhold, Inc., 6350 East Collins Road, Morris (I.D. #063806AAA):

<u>Item of Equipment</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>HAPs</u>	
						<u>Single*</u>	<u>Combined</u>
Polyester Plant			0.50		14.77	1.33	2.08
Tank S-501					0.96	0.96	0.96
Tank S-502					0.11	----	----
Tank S-503					0.40	0.40	0.40
Tank S-504					0.11	----	----
Tank S-514					0.96	0.96	0.96
Tank S-516					0.40	0.40	0.40
Tank S-517					0.11	----	----
Tank S-552					0.08	0.08	0.08
Tank S-580					1.81	1.81	1.81
Tanks S-585/587					1.30	1.30	1.30
Tank S-589					0.70	0.70	0.70
Tanks M-501, M-502, and M-503 (Controlled)					0.62	0.54	0.62
Tank M-501 (Uncontrolled)					0.30	0.24	0.30
Tank M-502 (Uncontrolled)					0.30	0.24	0.30
Tank M-503 (Uncontrolled)					0.30	0.24	0.30
Reactors R-101 and R- 102 (Controlled)					0.32	0.24	0.32
Reactor R-101 (Uncontrolled)					0.41	0.24	0.32
Reactor R-102 (Uncontrolled)					0.41	0.24	0.32
Tanks M-505 and M-510 (Controlled)					1.11	0.92	1.11
Tank M-505 (Uncontrolled)					1.24	0.90	1.24
Tank M-510 (Uncontrolled)					1.24	0.90	1.24
Reactor T-417					0.61	0.43	0.43

Item of Equipment	E M I S S I O N S (Tons/Year)						
	CO	NO _x	PM	SO ₂	VOM	HAPs	
						Single*	Combined
Tank T-217					0.01	0.01	0.01
Tank T-407A and Reactor R-307					17.78	0.11	0.14
Finished Product Loading					1.23	0.61	0.63
Boiler #1	19.50	23.21	1.76	0.14	1.28		
Boiler #2	27.59	32.85	2.50	37.36	1.81		
Hot Oil Heater	10.56	12.57	0.96	0.08	0.69		
Thermal Oxidizers H-102, HTO, & H-TEMP	1.84	2.19	0.16	0.01	0.12		
Diesel-Powered Generator	1.24	5.40	0.16	0.51	0.16		
Diesel-Powered Emergency Pump	0.48	2.25	0.16	0.15	0.18		
Fugitive/Miscellaneous Emissions					4.54	2.13	3.87
Tanks M-1 - M-13					5.72		
Tank M-15					0.44		
Tank M-508					0.44		
Tanks M-556, M-557 and M-558					1.32		
Storage Tank S-515					0.44		
Storage Tanks S-581 - S-584, S-586 & S-590					2.64		
Storage Tank S-588					0.44		
Storage Silos S-591 and S-592			0.88				
Storage Silo S-593			0.44				
Storage Silo S-594			0.44				
Storage Tanks T-171 and T-172					0.88		
Storage Tanks T-173 and T-174					0.88		
Storage Tanks T-501 - T-504					1.76		
Tank T-601					0.44		
Storage Tanks T-152 and T-153					0.88		
Subtotals:	<u>61.21</u>	<u>78.47</u>	<u>7.46</u>	<u>38.25</u>	<u>72.21</u>	<u>8.75**</u>	<u>20.02</u>

* Highest single HAP from each item of equipment.

** Total for Vinyl Acetate.

b. Forbo Adhesives LLC, 6352 East Collins Road, Morris (I.D. #063806AAL):

<u>Item of Equipment</u>	E M I S S I O N S (Tons/Year)						
	HAPs						
	<u>CO</u>	<u>NO_x</u>	<u>PM</u>	<u>SO₂</u>	<u>VOM</u>	<u>Single*</u>	<u>Combined</u>
Reactor/Blend Tank T-204/ R-301					0.28	0.27	0.28
Reactor/Blend Tank T-205/ R-302					0.37	0.36	0.36
Reactor/Blend Tank T-206/ R-303					0.19	0.18	0.18
Reactor/Blend Tank T-207/ R-304					0.36	0.35	0.35
Reactor R-305					0.79	0.77	0.77
Dirty Solvent Tank					0.14	0.14	0.14
Clean Solvent Tank					0.02	0.02	0.02
Regenerative Thermal Oxidizer	0.42	0.50	0.04	0.01	0.03	----	----
Solvent Distillation Vessel					0.44	----	----
MDI Storage Tanks T-203 and T-204a					0.88	----	----
Overflow Tank T-212					0.44	----	----
Polyol Storage Tanks T-201 and T-202					0.88	----	----
Subtotals:	<u>0.42</u>	<u>0.50</u>	<u>0.04</u>	<u>0.01</u>	<u>4.82</u>	<u>2.09*</u>	<u>2.10</u>

* Highest single HAP (Toluene).

c. Collocated Source Totals:

<u>Plant</u>	E M I S S I O N S (Tons/Year)						
	HAPs						
	<u>CO</u>	<u>NO_x</u>	<u>PM</u>	<u>SO₂</u>	<u>VOM</u>	<u>Single*</u>	<u>Combined</u>
Reichhold, Inc. (063806AAA)	61.21	78.47	7.46	38.25	72.21	8.75*	20.02
Forbo Adhesives LLC (063806AAL)	<u>0.42</u>	<u>0.50</u>	<u>0.04</u>	<u>0.01</u>	<u>4.82</u>	<u>2.09**</u>	<u>2.10</u>
Total:	<u>61.63</u>	<u>78.47</u>	<u>7.50</u>	<u>38.26</u>	<u>77.03</u>	<u>8.75*</u>	<u>13.86</u>

* Vinyl Acetate.

** Toluene.

Attachment B - Emissions Reduction Market System (ERMS)

1. Description of ERMS

The ERMS is a "cap and trade" market system for major stationary sources located in the Chicago ozone nonattainment area. It is designed to reduce VOM emissions from stationary sources to contribute to reasonable further progress toward attainment, as required by Section 182(c) of the Clean Air Act.

The ERMS addresses VOM emissions during a seasonal allotment period from May 1 through September 30. Participating sources must hold "allotment trading units" (ATUs) for their actual seasonal VOM emissions. Each year participating sources are issued ATUs based on allotments set in the sources' permits. These allotments are established from historical VOM emissions or "baseline emissions" lowered to provide the emissions reductions from stationary sources required for reasonable further progress.

By December 31 of each year, the end of the reconciliation period following the seasonal allotment period, each source shall have sufficient ATUs in its transaction account to cover its actual VOM emissions during the preceding season. A transaction account's balance as of December 31 will include any valid ATU transfer agreements entered into as of December 31 of the given year, provided such agreements are promptly submitted to the Illinois EPA for entry into the transaction account database. The Illinois EPA will then retire ATUs in sources' transaction accounts in amounts equivalent to their seasonal emissions. When a source does not appear to have sufficient ATUs in its transaction account, the Illinois EPA will issue a notice to the source to begin the process for Emissions Excursion Compensation.

In addition to receiving ATUs pursuant to their allotments, participating sources may also obtain ATUs from the market, including ATUs bought from other participating sources and general participants in the ERMS that hold ATUs (35 Ill. Adm. Code 205.630) and ATUs issued by the Illinois EPA as a consequence of VOM emissions reductions from an Emissions Reduction Generator or an Intersector Transaction (35 Ill. Adm. Code 205.500 and 35 Ill. Adm. Code 205.510). During the reconciliation period, sources may also buy ATUs from a secondary reserve of ATUs managed by the Illinois EPA, the "Alternative Compliance Market Account" (ACMA) (35 Ill. Adm. Code 205.710). Sources may also transfer or sell the ATUs that they hold to other sources or participants (35 Ill. Adm. Code 205.630).

2. Applicability

This source is considered a "participating source" for purposes of the ERMS, 35 Ill. Adm. Code Part 205.

3. Obligation to Hold Allotment Trading Units (ATUs)

- a. Pursuant to 35 Ill. Adm. Code 205.150(c)(1) and 35 Ill. Adm. Code 205.720, and as further addressed by Condition 8 of this Attachment, as of December 31 of each year, this source shall hold ATUs in its account in an amount not less than the ATU equivalent of its VOM emissions during the preceding seasonal allotment period (May 1 - September 30), not including VOM emissions from the following, or the source shall be subject to "emissions excursion compensation," as described in Condition 5 of this Attachment.
 - i. VOM emissions from emission units that the Illinois EPA determines would qualify as insignificant activities under 35 Ill. Adm. Code 201.Subpart F if the source were a CAAPP source and for which a statement to this effect is contained in the FESOP for a participating or new participating source are exempt from the requirements of 35 Ill. Adm. Code Part 205, in accordance with 35 Ill. Adm. Code 205.220(b);
 - ii. Excess VOM emissions associated with startup, malfunction, or breakdown of an emission unit for sources permitted to operate during startup, malfunction or breakdown pursuant to 35 Ill. Adm. Code 201.262, in accordance with 35 Ill. Adm. Code 205.225;
 - iii. Excess VOM emissions to the extent allowed by a Variance, Consent Order, or Compliance Schedule, in accordance with 35 Ill. Adm. Code 205.320(e)(3);
 - iv. Excess VOM emissions that are a consequence of an emergency as approved by the Illinois EPA, pursuant to 35 Ill. Adm. Code 205.750; and
 - v. VOM emissions from certain new and modified emission units as addressed by Condition 8(b) of this Attachment, if applicable, in accordance with 35 Ill. Adm. Code 205.320(f).
- b. Notwithstanding the above condition, in accordance with 35 Ill. Adm. Code 205.150(c)(2), if a source commences operation of a major modification, pursuant to 35 Ill. Adm. Code Part 203, the source shall hold ATUs in an amount not less than 1.3 times its seasonal VOM emissions attributable to such major modification during the seasonal allotment period, determined in accordance with the construction permit for such major modification or applicable provisions of this permit.

4. Market Transactions

- a. The source shall apply to the Illinois EPA for and obtain authorization for a Transaction Account prior to conducting any market transactions, as specified at 35 Ill. Adm. Code 205.610(a).

- b. The Permittee shall promptly submit to the Illinois EPA any revisions to the information submitted for its Transaction Account, pursuant to 35 Ill. Adm. Code 205.610(b).
- c. The source shall have at least one account officer designated for its Transaction Account, pursuant to 35 Ill. Adm. Code 205.620(a).
- d. Any transfer of ATUs to or from the source from another source or general participant must be authorized by a qualified Account Officer designated by the source and approved by the Illinois EPA, in accordance with 35 Ill. Adm. Code 205.620, and the transfer must be submitted to the Illinois EPA for entry into the Transaction Account database.

5. Emissions Excursion Compensation

Pursuant to 35 Ill. Adm. Code 205.720, if the source fails to hold ATUs in accordance with Condition 3 of this Attachment, it shall provide emissions excursion compensation in accordance with the following:

- a. Upon receipt of an Excursion Compensation Notice issued by the Illinois EPA, the source shall purchase ATUs from the ACMA in the amount specified by the notice, as follows:
 - i. The purchase of ATUs shall be in an amount equivalent to 1.2 times the emissions excursion; or
 - ii. If the source had an emissions excursion for the seasonal allotment period immediately before the period for the present emissions excursion, the source shall purchase ATUs in an amount equivalent to 1.5 times the emissions excursion.
- b. If requested in accordance with paragraph (c) below or in the event that the ACMA balance is not adequate to cover the total emissions excursion amount, the Illinois EPA will deduct ATUs equivalent to the specified amount or any remaining portion thereof from the ATUs to be issued to the source for the next seasonal allotment period.
- c. Pursuant to 35 Ill. Adm. Code 205.720(c), within 15 days after receipt of an Excursion Compensation Notice, the owner or operator may request that ATUs equivalent to the amount specified be deducted from the source's next seasonal allotment by the Illinois EPA, rather than purchased from the ACMA.

6. Quantification of Seasonal VOM Emissions

- a. The methods and procedures specified in this permit for determining VOM emissions and compliance with VOM emission limitations shall be used for determining seasonal VOM emissions for purposes of the ERMS, with the following exceptions [35 Ill. Adm. Code 205.315(b)]:

No exceptions

- b. The Permittee shall report emergency conditions at the source to the Illinois EPA, in accordance with 35 Ill. Adm. Code 205.750, if the Permittee intends to deduct VOM emissions in excess of the technology-based emission rates normally achieved that are attributable to the emergency from the source's seasonal VOM emissions for purposes of the ERMS. These reports shall include the information specified by 35 Ill. Adm. Code 205.750(a), and shall be submitted in accordance with the following:
 - i. An initial emergency conditions report within two days after the time when such excess emissions occurred due to the emergency; and
 - ii. A final emergency conditions report, if needed to supplement the initial report, within 10 days after the conclusion of the emergency.
7. Annual Account Reporting
- a. For each year in which the source is operational, the Permittee shall submit, as a component of its Annual Emissions Report, seasonal VOM emissions information to the Illinois EPA for the seasonal allotment period. This report shall include the following information [35 Ill. Adm. Code 205.300]:
 - i. Actual seasonal emissions of VOM from the source;
 - ii. A description of the methods and practices used to determine VOM emissions, as required by this permit, including any supporting documentation and calculations;
 - iii. A detailed description of any monitoring methods that differ from the methods specified in this permit, as provided in 35 Ill. Adm. Code 205.337;
 - iv. If a source has experienced an emergency, as provided in 35 Ill. Adm. Code 205.750, the report shall reference the associated emergency conditions report that has been approved by the Illinois EPA;
 - v. If a source's baseline emissions have been adjusted due to a Variance, Consent Order, or CAAPP permit Compliance Schedule, as provided for in 35 Ill. Adm. Code 205.320(e)(3), the report shall provide documentation quantifying the excess VOM emissions during the season that were allowed by the Variance, Consent Order, or Compliance Schedule, in accordance with 35 Ill. Adm. Code 205.320(e)(3); and
 - vi. If a source is operating a new or modified emission unit for which three years of operational data is not yet

available, as specified in 35 Ill. Adm. Code 205.320(f), the report shall specify seasonal VOM emissions attributable to the new emission unit or the modification of the emission unit.

- b. This report shall be submitted by November 30 of each year, for the preceding seasonal allotment period.

8. Allotment of ATUs to the Source

- a.
 - i. The allotment of ATUs to this source (including both Reichhold, Inc., 6350 East Collins Road, Morris (I.D. #063806AAA) and Forbo Adhesives LLC, 6352 East Collins Road, Morris (I.D. #063806AAL)) is 130 ATUs per seasonal allotment period.
 - ii. This allotment of ATUs reflects the Illinois EPA's determination that the source's baseline emissions were 14.684 tons per season.
 - A. This determination includes the use of 2002 as a baseline season, the first season for which VOM emissions exceeded 10 tons.
 - iii. The source's allotment reflects 88% of the baseline emissions (12% reduction), except for the VOM emissions from specific emission units excluded from such reduction, pursuant to 35 Ill. Adm. Code 205.405, including units complying with MACT or using BAT, as identified in Condition 10 of this Attachment of this permit.
 - iv. ATUs will be issued to the source's Transaction Account by the Illinois EPA annually. These ATUs will be valid for the seasonal allotment period following issuance and, if not retired in this season, the next seasonal allotment period.
 - v. Condition 3(a) of this Attachment becomes effective beginning in the seasonal allotment period following the initial issuance of ATUs by the Illinois EPA into the Transaction Account for the source.
- b. Contingent Allotments for New or Modified Emission Units

Not applicable.
- c. Notwithstanding the above, part or all of the above ATUs will not be issued to the source in circumstances as set forth in 35 Ill. Adm. Code Part 205, including:
 - i. Transfer of ATUs by the source to another participant or the ACMA, in accordance with 35 Ill. Adm. Code 205.630;

- ii. Deduction of ATUs as a consequence of emissions excursion compensation, in accordance with 35 Ill. Adm. Code 205.720; and
- iii. Transfer of ATUs to the ACMA, as a consequence of shutdown of the source, in accordance with 35 Ill. Adm. Code 205.410.

9. Recordkeeping for ERMS

The Permittee shall maintain copies of the following documents as its Compliance Master File for purposes of the ERMS [35 Ill. Adm. Code 205.700(a)]:

- a. Seasonal component of the Annual Emissions Report;
- b. Information on actual VOM emissions, as recorded and as required by Condition 19(a)(vii) of this permit and Condition 6(a) of this Attachment; and
- c. Any transfer agreements for the purchase or sale of ATUs and other documentation associated with the transfer of ATUs.

10. Exclusions from Further Reductions

- a. VOM emissions from the following emission units shall be excluded from the VOM emissions reductions requirements specified in 35 Ill. Adm. Code 205.400(c) and (e) as long as such emission units continue to satisfy the following [35 Ill. Adm. Code 205.405(a)]:
 - i. Emission units that comply with any NESHAP or MACT standard promulgated pursuant to the Clean Air Act;
 - ii. Direct combustion emission units designed and used for comfort heating purposes, fuel combustion emission units, and internal combustion engines; and
 - iii. An emission unit for which a LAER demonstration has been approved by the Illinois EPA on or after November 15, 1990.

The source has demonstrated in its ERMS application and the Illinois EPA has determined that the following emission units qualify for exclusion from further reductions because they meet the criteria as indicated above [35 Ill. Adm. Code 205.405(a) and (c)]:

Boilers 1 and 2

- b. VOM emissions from emission units using BAT for controlling VOM emissions shall not be subject to the VOM emissions reductions requirement specified in 35 Ill. Adm. Code 205.400(c) or (e) as long as such emission unit continues to use such BAT [35 Ill. Adm. Code 205.405(b)].

The source has demonstrated in its ERMS application and the Illinois EPA has determined that the following emission units qualify for exclusion from further reductions because these emission units use BAT for controlling VOM emissions as indicated above [35 Ill. Adm. Code 205.405(b) and (c)]:

None