

217/782-2113

FEDERALLY ENFORCEABLE STATE OPERATING PERMIT - RENEWAL

PERMITTEE

Mikron Industries  
d/b/a: Mikron Midwest  
Attn: Todd Thompson - Purchasing Manager  
501 North Elida Street  
Winnebago, Illinois 61088

Application No.: 03030093                      I.D. No.: 201050AAL  
Applicant's Designation: Marvin Line              Date Received: March 9, 2011  
Subject: Vinyl Window/Door Frame Extrusion and Ancillary Ops.  
Date Issued: August 19, 2011              Expiration Date: August 19, 2016  
Location: 501 North Elida Street, Winnebago, Winnebago County

This permit is hereby granted to the above-designated Permittee to OPERATE emission source(s) and/or air pollution control equipment consisting of one (1) vinyl windows and door frames extrusion operation, one (1) laminator line, one (1) wood veneer line, a recycle system grinder/pulverizer controlled by cyclones and baghouse, PVC Transfer from Trucks to Silos (2 units), PVC Transfer from Silos to Mixing Station (2 units), PVC Transfer from Mixing Station to Day Bin (2 units), and PVC Transfer from Day Bin to Extruders (24 units) 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 ton/year for Volatile Organic Material (VOM), 10 tons/year for any single Hazardous Air Pollutant (HAP), and 25 tons/year of 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 Plywood and Composite Wood Products, 40 CFR 63 Subpart DDDD and the National Emission Standards for Hazardous Air Pollutants (NESHAP) for Surface Coating of Wood Building Products, 40 CFR 63 Subpart QQQQ.
  - iii. To establish federally enforceable production and operating limitations, which restrict the potential to emit for VOM to less than 25 tons per year so that the source is not subject to the requirements of 35 Ill. Adm. Code 215.204 (Coating Operations).

The maximum emissions of this source, as limited by the conditions of this permit, are described in Attachment A.

- b. Prior to issuance, a draft of this permit has undergone a public notice and comment period.
  - c. This permit supersedes all operating permits issued for this location.
- 2a. Pursuant to 35 Ill. Adm. Code 212.123(a), no person shall cause or allow the emission of smoke or other particulate matter, with an opacity greater than 30 percent, into the atmosphere from any emission unit other than those emission units subject to 35 Ill. Adm. Code 212.122.
- b. Pursuant to 35 Ill. Adm. Code 212.123(b), the emission of smoke or other particulate matter from any such emission unit may have an opacity greater than 30 percent but not greater than 60 percent for a period or periods aggregating 8 minutes in any 60 minute period provided that such opaque emissions permitted during any 60 minute period shall occur from only one such emission unit located within a 305 m (1000 ft) radius from the center point of any other such emission unit owned or operated by such person, and provided further that such opaque emissions permitted from each such emission unit shall be limited to 3 times in any 24 hour period.
  - c. Pursuant to 35 Ill. Adm. Code 212.321(a), no person shall cause or allow the emission of particulate matter into the atmosphere in any one hour period from any new process emission unit which, either alone or in combination with the emission of particulate matter from all other similar process emission units for which construction or modification commenced on or after April 14, 1972, at a source or premises, exceeds the allowable emission rates specified in 35 Ill. Adm. Code 212.321(c).
3. Pursuant to 35 Ill. Adm. Code 215.301, 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 215.302, 215.303, 215.304 and the following exception: If no odor nuisance exists the limitation of 35 Ill. Adm. Code 215 Subpart K shall apply only to photochemically reactive material.
- 4a. This permit is issued based on the cleanup associated with the Wood Veneer Line (EU-11) not being subject to the National Emission Standards for Hazardous Air Pollutants (NESHAP) for Halogenated Solvent Cleaning, 40 CFR 63 Subpart T. Pursuant to 40 CFR 63.460(a), wipe cleaning activities, such as using a rag containing halogenated solvent or a spray cleaner containing halogenated solvent are not covered under the provisions of 40 CFR 63 Subpart T.

- b. This permit is issued based on the source not being subject to the National Emission Standard for Hazardous Air Pollutants (NESHAP) for Wood Furniture Manufacturing Operations, 40 CFR 63 Subpart JJ because the source is not engaged, either in part or in whole, in the manufacture of wood furniture or wood furniture components. Pursuant to 40 CFR 63.801, wood furniture means any product made of wood, a wood product such as rattan or wicker, or an engineered wood product such as particleboard that is manufactured under any of the following standard industrial classification codes: 2434, 2511, 2512, 2517, 2519, 2521, 2531, 2541, 2599, or 5712.
  - c. This permit is issued based on the Wood Veneer Line (EU-11) not being subject to the National Emission Standard for Hazardous Air Pollutants (NESHAP) for Plywood and Composite Wood Products, 40 CFR 63 Subpart DDDD because the source is not a major source of HAP emissions. 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 established in this permit.
  - d. This permit is issued based on the Wood Veneer Line (EU-11) not being subject to the National Emission Standard for Hazardous Air Pollutants (NESHAP) for Surface Coating of Wood Building Products, 40 CFR 63 Subpart QQQQ because the source is not a major source of HAP emissions. 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 established in this permit.
  - e. This permit is issued based on the source not being subject to the National Emission Standard for Hazardous Air Pollutants (NESHAP) for Wood Preserving Area Source, 40 CFR 63 Subpart QQQQQQ because the source is not a wood preserving operation. Pursuant to 40 CFR 63.11433, wood preserving means the pressure or thermal impregnation of chemicals into wood to provide effective long-term resistance to attack by fungi, bacteria, insects, and marine borers.
5. Pursuant to 35 Ill. Adm. Code 215.181(a), the requirements of 35 Ill. Adm. Code 215.182 through 215.184 for solvent cleaning in general shall not apply to sources whose emissions of volatile organic material do not exceed 6.8 kg (15 lbs) in any one day, nor 1.4 kg (3 lbs) in any one hour.
- 6a. 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 Permittee shall, in accordance with the manufacturer(s) and/or vendor(s) recommendations, perform periodic maintenance on the cyclones and baghouse such that the cyclones and baghouse are kept in proper working condition and not cause a violation of the Illinois Environmental Protection Act or regulations promulgated therein.

7a. Emission and operation of the laminator line and wood veneer line combined shall not exceed the following limits:

i. Material usage:

<u>Material</u>	<u>Material Usage</u>		<u>VOM Content</u>
	<u>(Gal/Mo)</u>	<u>(Gal/Yr)</u>	<u>(Weight %)</u>
Methylene Chloride	216	1,730	0
Primer	109	875	100
Adhesives	745	5,960	80

ii. Emissions limits:

<u>Material</u>	<u>Pollutant</u>	<u>Emissions</u>	
		<u>(Tons/Mo)</u>	<u>(Tons/Yr)</u>
Methylene Chloride	HAP	1.12	9.50
Primer	VOM	0.40	3.10
Adhesives	VOM/HAP	0.01	0.10

These limits are based on the maximum emissions determined from a mass balance at the maximum material usage rate.

b. Emission and operation associated with the cleaning of the extruders shall not exceed the following limits:

<u>Material</u>	<u>Material Usage</u>		<u>VOM Content</u>	<u>VOM Emissions</u>	
	<u>(Gal/Mo)</u>	<u>(Gal/Yr)</u>	<u>(lb VOM/Gal)</u>	<u>(Tons/Mo)</u>	<u>(Tons/Yr)</u>
Cleaning Solvent	342	2,735	6.58	1.12	9.00

These limits are based on the maximum emissions determined from a mass balance at the maximum material usage rate.

c. Emissions of particulate matter (PM) from the recycle system grinder/pulverizer controlled by cyclones and baghouse shall not exceed 0.2 tons/month and 1.2 tons/year.

d. This permit is issued based upon negligible emissions of PM from the PVC Transfer from Trucks to Silos (2 units), PVC Transfer from Silos to Mixing Station (2 units), PVC Transfer from Mixing Station to Day Bin (2 units), and PVC Transfer from the Day Bin to Extruders (26 units). For this purpose, emissions from each emission unit shall not exceed nominal emission rates of 0.05 lbs/hour and 0.22 tons/year.

- e. The emissions of Hazardous Air Pollutants (HAPs) as listed in Section 112(b) of the Clean Air Act from this source shall not exceed 1.12 tons/month and 9.50 tons/year of any single HAP and 1.24 tons/month and 9.90 tons per 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 Illinois EPA, Section 112(g) of the Clean Air Act, 40 CFR 63 Subpart DDDD, and/or 40 CFR 63 Subpart QQQQ.
- f. Compliance with the annual limits of this permit shall be determined on a monthly basis from the sum of the data for the current month plus the preceding 11 months (running 12 month total).
- 8a. 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 9 shall be performed upon a written request from the Illinois EPA by a qualified independent testing service.
- 9. 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.

10. The Permittee shall monitor and record the pressure drop of the baghouse on a weekly basis.
11. 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.
12. 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.
- 13a. The Permittee shall maintain records of the following items so as to demonstrate compliance with the conditions of this permit:

- i. Records addressing use of good operating practices for the cyclones and baghouse:
    - A. Records for periodic inspection of the cyclones and baghouse 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.
  - ii. Usage of each material associated with the laminator and wood veneer lines operations (gallons/month and gallons/year);
  - iii. Usage of each material associated with the cleaning of the extruders (gallons/month and gallons/year);
  - iv. VOM and HAP content of each material used (% by weight); and
  - v. Monthly and annual emissions of PM, 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.
14. 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.
- 15a. 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  
5407 North University  
Peoria, Illinois 61614

It should be noted that this permit has been revised to include of the equipment described in Construction permit #11030016.

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

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

Date Signed: \_\_\_\_\_

ECB:GB:jws

cc: Illinois EPA, FOS Region 2  
Lotus Notes

Attachment A - Emission Summary

This attachment provides a summary of the maximum emissions from the vinyl window and door frame manufacturing plant 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 ton/year for VOM, 10 tons/year for any single HAP, and 25 tons/year for any combination of such HAPs) 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>	Emissions (Tons/Year)			
	<u>PM</u>	<u>VOM</u>	<u>Single HAP</u>	<u>Total HAP</u>
Laminator & Wood Veneer Line		3.20	9.50	9.60
Extruder Cleaning		9.00		
PVC Transfer from Trucks to Silos (2 units)	0.44			
PVC Transfer from Silos to Mixing Station (2 units)	0.44			
PVC Transfer from Mixing Station to Day Bin (2 units)	0.44			
PVC Transfer from the Day Bin to Extruders (26 units)	5.28			
Grinder/Pulverizer	1.20	--	--	--
Totals:	7.80	12.20	9.50	9.90