

217/782-2113

FEDERALLY ENFORCEABLE STATE OPERATING PERMIT

PERMITTEE

American Louver Company
Attn: Barry Pucillo
7700 Austin Avenue
Skokie, Illinois 60077

Application No.: 98010093

I.D. No.: 031288AHN

Applicant's Designation:

Date Received: January 20, 1998

Subject: Plastic Louvers and Mirrors

Date Issued: July 20, 2000

Expiration Date: July 20, 2005

Location: 7700 Austin Avenue, Skokie

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

Three Resin Pellet Silos
Six Injection Molding Machines
Coating Spray Booth for Mirror Coating Operation
Louver Coating Operation with Ovens Controlled with Catalytic Afterburner
Blow Molding Plastic Extrusion Machine
Natural Gas Fired 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 to limit the emissions of air pollutants from the source to less than major source thresholds (i.e. 25 tons per volatile organic material (VOM), 10 tons per year of any single hazardous air pollutant). As a result the source is excluded from the requirement to obtain a Clean Air Act Permit Program (CAAPP) permit. The maximum emissions of this source, as limited by the conditions of this permit, are described in Attachment A.
- b. Prior to issuance, a draft of this permit has undergone a public notice and comment period.
- c. This permit supersedes all operating permits issued for this location.
- 2a. Combined usage of coatings and solvents and resulting volatile organic material emissions shall not exceed the following limits:

		Controlled
VOM	Usage	VOM Emissions*

<u>Materials</u>	<u>(Lb/Gal)</u>	<u>(Gal/Mo)</u>	<u>(Gal/Yr)</u>	<u>(Lb/Mo)</u>	<u>(Lb/Yr)</u>
Top Coatings	5.500	170	1,360	47	374
Basecoat	3.460	1,875	15,000	324	2,595
Naphtha	6.300	45	350	14	110
Heptane	5.800	6,550	52,500	1,900	15,225
Mineral Spirits	6.500	1,200	3,600	390	1,170

<u>Materials</u>	VOM	Usage		VOM Emissions**	
	(Lb/Gal)	(Gal/Mo)	(Gal/Yr)	(Lb/Mo)	(Lb/Yr)
Mirror Waterbase	0.38	125	1,000	48	390

<u>Cleanup Solvent</u>	VOM	Usage		VOM Emissions**	
	(Lb/Gal)	(Gal/Mo)	(Gal/Yr)	(Lb/Mo)	(Lb/Yr)
MEK	6.680	75	150	501	1,002

<u>Materials</u>	VOM	Resin Usage		VOM Emissions**	
	(Lb/Ton)	(Tons/Mo)	(Tons/Yr)	(Ton/Mo)	(Ton/Yr)
Acrylic Pellets	14.00	94	750	0.45	5.25
Styrene Pellets	1.16	344	2,750	0.13	1.60
Polyolefin Pellets	0.40	188	1,500	0.04	0.30

Note:

- * Catalytic afterburner with control efficiency of 95%
- ** VOM emissions are emitted to atmosphere without control.

Compliance with the above operating and emission limits shall be determined monthly from required usage records. Compliance with the annual limits shall be determined monthly from the last 12 months of operating data.

- b. Natural gas combustion shall not exceed 1.75 million cubic feet per month and 10.5 million cubic feet per year.

<u>Pollutant</u>	Emission Factor	Emissions	
	(Lb/mmcf)	(Lbs/Mo)	(Lbs/Yr)
PM	7.6	13.30	79.8
SO ₂	0.6	0.79	6.30
NO _x	100.0	175.00	1,050.00
CO	84.0	147.00	882.00
VOM	5.5	9.63	57.75

Compliance with the above operating and emission limits shall be determined monthly from natural gas usage and standard emission factors. Compliance with the annual limits shall be determined monthly from the last 12 months of natural gas usage.

- c. Negligible particulate matter (PM) emissions of 0.4 tons per year is permitted from the injection molding machines and pellet silos.
3. The emissions of Hazardous Air Pollutants (HAPs) as listed in Section 112(b) of the Clean Air Act shall not equal or exceed 10 tons per year

of any single HAP or 25 tons per year of any combination of such HAPs, or such lesser quantity as USEPA may establish in a rule which would require the Permittee to obtain a CAAPP permit from the Illinois EPA. 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.

- 4a. The catalytic afterburner shall be in operation at all times the louver coating operation is operating.
- b. The catalytic afterburner shall be operated in accordance with the requirements of 35 Ill. Adm. Code 218.105(d)(2).
 - i. Permanent temperature monitors shall continuously monitor and record both the temperature upstream and downstream of the catalyst bed.
 - ii. These monitors shall be calibrated, operated and maintained in accordance with the requirements of 35 Ill. Adm. Code 218.105(d)(2).
- c. The catalytic afterburner combustion chamber shall be preheated to at least the manufacturer's recommended temperature before the coating process begins. At least this temperature shall be maintained during operation of the coating lines.
- d.
 - i. At least once a year, the catalyst bed level in the catalytic afterburner shall be checked and recorded.
 - ii. Any additional or replacement catalyst shall be recorded.
5. The Permittee shall collect and record the following information:
 - a. Name and identification number, density, and VOM and HAP content of each coating and VOM containing material used.
 - b. Usage of each coating and VOM containing material on a monthly and annual basis.
 - c. Emissions of VOM on a rolling 12 month basis.
 - d. Afterburner monitoring data.
 - e. A log of operating time for the afterburner, monitoring devices, and coating lines.
 - f. A maintenance log for the afterburner, and monitoring devices detailing all routine and non-routine maintenance performed including dates and duration of any outages.
 - g. All records and logs required by this permit shall be retained at a readily accessible location at the source for at least three years from the date of entry and shall be made available for inspection and copying by the Illinois EPA or USEPA upon request. Any records retained in an electronic format (e.g., computer) shall be capable of being retrieved and printed on paper during

normal source office hours so as to be able to respond to an Illinois EPA or USEPA request for records during the course of a source inspection.

6. If there is an exceedance of the requirements of this permit as determined by the records required by this permit, the Permittee shall submit a report to the Illinois EPA's Compliance Section in Springfield, Illinois within 30 days after the exceedance. 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 violation and efforts to reduce emissions and future occurrences.
7. Two copies of required reports and notifications concerning equipment operation or repairs, performance testing, or a continuous monitoring system 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 the following address unless otherwise indicated:

Illinois Environmental Protection Agency
Division of Air Pollution Control
Eisenhower Tower
1701 First Avenue
Maywood, Illinois 60153

8. Annual emissions of regulated air pollutants shall not exceed a total of 25 tons, which shall be the permitted emissions for this site.

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

Donald E. Sutton, P.E.
Manager, Permit Section
Division of Air Pollution Control

DES:JDC:jar

cc: Illinois EPA, FOS Region 1
Illinois EPA, Compliance Section
USEPA

Attachment A -Emission Summary

This attachment provides a summary of the maximum emissions from the production of plastic louvers and mirrors operating in compliance with the requirements of this federally enforceable permit. In preparing this summary, the Illinois EPA used the annual operating scenario, which results in maximum emissions from such a plant. This scenario limits coating and solvent usage and further controlling VOM and HAPs emissions with a catalytic afterburner. The resulting maximum emissions are well below the major source level of 10 tons per year for each hazardous air pollutant and a total of 25 tons per year and below 25 tons per year for volatile organic material 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.

1a. Emissions and operational limitations for the louver and mirror coating lines:

<u>Materials</u>	VOM	Usage		Controlled VOM Emissions*	
	(Lb/Gal)	(Gal/Mo)	(Gal/Yr)	(Lb/Mo)	(Lb/Yr)
Top Coatings	5.500	170	1,360	47	374
Basecoat	3.460	1,875	15,000	324	2,595
Naphtha	6.300	45	350	14	110
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<u>Materials</u>	VOM	Usage		VOM Emissions**	
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Mirror Waterbase	0.38	125	1,000	48	390

<u>Cleanup Solvent</u>	VOM	Usage		VOM Emissions**	
	(Lb/Gal)	(Gal/Mo)	(Gal/Yr)	(Lb/Mo)	(Lb/Yr)
MEK	6.680	75	150	501	1,002

<u>Materials</u>	VOM	Resin Usage		VOM Emissions**	
	(Lb/Ton)	(Tons/Mo)	(Tons/Yr)	(Ton/Mo)	(Ton/Yr)
Acrylic Pellets	14.00	94	750	0.45	5.25
Styrene Pellets	1.16	344	2,750	0.13	1.60
Polyolefin Pellets	0.40	188	1,500	0.04	0.30

Note:

- * Catalytic afterburner with control efficiency of 95%
- ** VOM emissions are emitted to atmosphere without control.

- b. Emissions and operation limits of the natural combustion units are 10.5 million cubic feet per year.

<u>Pollutant</u>	Emission Factor	Emissions	
	(Lb/mmcf)	(Lbs/Mo)	(Lbs/Yr)
PM	7.6	13.30	79.8
SO ₂	0.6	0.79	6.30
NO _x	100.0	175.00	1,050.00
CO	84.0	147.00	882.00
VOM	5.5	9.63	57.75

- c. Negligible particulate matter (PM) emissions of 0.4 tons per year is permitted from the injection molding machines and pellet silos.
- 2. As a consequence of the requirements of this permit, the emissions of hazardous air pollutants (HAP) as listed in Section 112(b) of the Clean Air Act from this source will be less than 10 tons/year of any single HAP and 25 tons/year of any combination of such HAPs so that HAP emissions do not trigger the requirements to obtain a Clean Air Act Permit Program permit from the Illinois EPA.

<u>Materials</u>	Hazardous Air Pollutants (lbs/yr)				
	<u>MEK</u>	<u>Glycol Ether</u>	<u>Triethylamine</u>	<u>Methyl Methacrylate</u>	<u>Styrene</u>
MEK	1,002	---	---	---	---
Mirror Waterbase*	---	---	190	---	---
Acrylic Pellets*	---	---	---	9,000	---
Styrene Pellets*	---	---	---	---	2,541

Note:

* HAP emissions are uncontrolled