

STATE OF MISSOURI



DEPARTMENT OF NATURAL RESOURCES

MISSOURI AIR CONSERVATION COMMISSION

PERMIT TO CONSTRUCT

Under the authority of RSMo 643 and the Federal Clean Air Act the applicant is authorized to construct the air contaminant source(s) described below, in accordance with the laws, rules and conditions as set forth herein.

Permit Number: **022013-002** Project Number: 2012-09-010  
Installation Number: 201-0021

Parent Company: Havco Wood Products, Inc.

Parent Company Address: P.O. Box 1342, Cape Girardeau, MO 63702

Installation Name: Havco Wood Products, Inc.

Installation Address: 3200 East Outer Road, Scott City, MO 63780

Location Information: Scott County, S25, T30N, R13E

Application for Authority to Construct was made for:  
Addition of a new adhesive in emission unit EU0080 (EP-19). This review was conducted in accordance with Section (5), Missouri State Rule 10 CSR 10-6.060, *Construction Permits Required*.

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- Standard Conditions (on reverse) are applicable to this permit.
- Standard Conditions (on reverse) and Special Conditions are applicable to this permit.

FEB 14 2013

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EFFECTIVE DATE

A handwritten signature in cursive script, reading "Kyla L. Moore".  
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DIRECTOR OR DESIGNEE  
DEPARTMENT OF NATURAL RESOURCES

## STANDARD CONDITIONS:

Permission to construct may be revoked if you fail to begin construction or modification within two years from the effective date of this permit. Permittee should notify the Air Pollution Control Program if construction or modification is not started within two years after the effective date of this permit, or if construction or modification is suspended for one year or more.

You will be in violation of 10 CSR 10-6.060 if you fail to adhere to the specifications and conditions listed in your application, this permit and the project review. In the event that there is a discrepancy between the permit application and this permit, the conditions of this permit shall take precedence. Specifically, all air contaminant control devices shall be operated and maintained as specified in the application, associated plans and specifications.

You must notify the Department's Air Pollution Control Program of the anticipated date of startup of these air contaminant sources. The information must be made available within 30 days of actual startup. Also, you must notify the Department of Natural Resources Regional office responsible for the area within which you are located within 15 days after the actual startup of these air contaminant sources.

A copy of this permit and permit review shall be kept at the installation address and shall be made available to Department of Natural Resources' personnel upon request.

You may appeal this permit or any of the listed special conditions to the Administrative Hearing Commission (AHC), P.O. Box 1557, Jefferson City, MO 65102, as provided in RSMo 643.075.6 and 621.250.3. If you choose to appeal, you must file a petition with the AHC within 30 days after the date this decision was mailed or the date it was delivered, whichever date was earlier. If any such petition is sent by registered mail or certified mail, it will be deemed filed on the date it is mailed. If it is sent by any method other than registered mail or certified mail, it will be deemed filed on the date it is received by the AHC.

If you choose not to appeal, this certificate, the project review and your application and associated correspondence constitutes your permit to construct. The permit allows you to construct and operate your air contaminant sources(s), but in no way relieves you of your obligation to comply with all applicable provisions of the Missouri Air Conservation Law, regulations of the Missouri Department of Natural Resources and other applicable federal, state and local laws and ordinances.

The Air Pollution Control Program invites your questions regarding this air pollution permit. Please contact the Construction Permit Unit at (573) 751-4817. If you prefer to write, please address your correspondence to the Missouri Department of Natural Resources, Air Pollution Control Program, P.O. Box 176, Jefferson City, MO 65102-0176, attention: Construction Permit Unit.

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Permit No.	
Project No.	2012-09-010

**SPECIAL CONDITIONS:**

The permittee is authorized to construct and operate subject to the following special conditions:

*The special conditions listed in this permit were included based on the authority granted the Missouri Air Pollution Control Program by the Missouri Air Conservation Law (specifically 643.075) and by the Missouri Rules listed in Title 10, Division 10 of the Code of State Regulations (specifically 10 CSR 10-6.060). For specific details regarding conditions, see 10 CSR 10-6.060 paragraph (12)(A)10. "Conditions required by permitting authority."*

Havco Wood Products, Inc.  
Scott County, S25, T30N, R13E

1. Use of Alternative Adhesives in the Glue Handling (EP-19)
  - A. When considering using an alternative material in the glue handling (EP-19) that is different than a material listed in the Application for Authority to Construct, Havco Wood Products shall calculate the potential emissions of each individual HAP and total VOC in the alternative material.
  - B. Havco Wood Products shall seek approval from the Air Pollution Control Program before use of the alternative material if the potential individual HAP emissions for the alternative material are equal to or greater than the screening model action level (SMAL) for any chemical listed in Appendix B or if the total VOC potential emissions exceed 14.72 tons per year.
  - C. Attachment A or equivalent forms, such as electronic forms, approved by the Air Pollution Control Program shall be used to show compliance with Special Condition 1.A.
2. Record Keeping and Reporting Requirements
  - A. Havco Wood Products, Inc. shall maintain all records required by this permit for not less than five years and shall make them available immediately to any Missouri Department of Natural Resources' personnel upon request. These records shall include MSDS for all materials used.
  - B. Havco Wood Products, Inc. shall report to the Air Pollution Control Program's Compliance/Enforcement Section, P.O. Box 176, Jefferson City, MO 65102, no later than ten days after the end of the month during which any record required by this permit show an exceedance of a limitation imposed by this permit.

REVIEW OF APPLICATION FOR AUTHORITY TO CONSTRUCT AND OPERATE  
SECTION (5) REVIEW

Project Number: 2012-09-010  
Installation ID Number: 201-0021  
Permit Number:

Havco Wood Products, Inc.  
3200 East Outer Road  
Scott City, MO 63780

Complete: September 5, 2012

Parent Company:  
Havco Wood Products, Inc.  
P.O. Box 1342  
Cape Girardeau, MO 63702

Scott County, S25, T30N, R13E

REVIEW SUMMARY

- Havco Wood Products, Inc. has applied for authority to allow use of a new adhesive in emission unit EU0080 (EP-19).
- HAP emissions are expected from the proposed equipment. HAPs of concern from this process are formaldehyde (CAS# 50-00-0) and methanol (CAS# 67-56-1).
- None of the New Source Performance Standards (NSPS) apply to this application.
- None of the NESHAPs apply to this application. None of the currently promulgated MACT regulations apply to this application.
- A wet scrubber is being used to control the formaldehyde, methanol, and VOC emissions from the equipment in this permit. The use of the wet scrubber is required in Special Condition 1 of Permit No. 022000-003.
- This review was conducted in accordance with Section (5) of Missouri State Rule 10 CSR 10-6.060, *Construction Permits Required*. Potential emissions of all pollutants are below de minimis levels.
- This installation is located in Scott County, an attainment area for all criteria pollutants.
- This installation is not on the List of Named Installations found in 10 CSR 10-6.020(3)(B), Table 2. The installation's major source level is 250 tons per year and fugitive emissions are not counted toward major source applicability.
- Ambient air quality modeling was not performed since potential emissions of the application are below de minimis levels.

- Emissions testing is not required for the equipment.
- A Part 70 Operating Permit is required for this installation.
- Approval of this permit is recommended with special conditions.

### INSTALLATION DESCRIPTION

Havco Wood Products, Inc. (Havco) produces laminated oak flooring for dry van trailers, truck bodies, and containers at their location in Scott County, Missouri. The flooring process begins with raw lumber (red and white oak). The wood is stacked and dried, and then kiln dried to insure the proper moisture content. Other processes include planning, sawing, sanding, and gluing wood.

Havco was issued a Part 70 Operating Permit (Permit No. OP2007-060) from the Air Pollution Control Program (APCP). A renewal application for this permit was received at the Air Pollution Control Program on May 30, 2012, and is currently under review.

The following New Source Review permits have been issued to Havco Wood Products, Inc. from the Air Pollution Control Program.

Table 1: Permit History

Permit Number	Description
1186-005	Wood waste fired boiler
1194-009	Sec 5 & 6
1097-020	Requesting change to a multi-clone from a bag
022000-003	New production lines
022001-012	New laminating process
062007-006	Sawdust bin

### PROJECT DESCRIPTION

Havco was issued Construction Permit 022000-003 for the addition of two new wood flooring production lines and one 15.4 MMBTU per hour natural gas fired boiler in February of 2000. Permit 022000-003 allows for the use of one adhesive (MUF400 Melamine Urea Formaldehyde Resin Spray Dried Powder (MUF400)) and one catalyst (Catalyst I-25). Havco requested an amendment to permit 022000-003 to allow for the use of another adhesive (Momentive 4720H) as well as MUF400 and Catalyst I-25. The use of Momentive 4720H causes an increase in emissions therefore requiring a permit. This permit is not superseding Construction Permit 022000-003, therefore, still allowing using of MUF400 and Catalyst I-25.

### EMISSIONS/CONTROLS EVALUATION

The emissions from the glue handling (EP-19) were calculated using the maximum hourly design rate and MSDS supplied by Havco. All available VOCs and volatile HAPs were considered to be emitted. The MHDR of the glue handling process was determined by the drying capacity of the facility. The facility would have to add additional drying kilns and steam capacity to operate at a higher production rate. The maximum hourly design rate for EP-19 is 240 pounds of adhesive per hour.

Multiplying the MHDR by the VOC content from the MSDS the VOC unconditioned potential emissions of EP-19 were determined. Multiplying the MHDR by the HAP weight percent of the material the unconditioned potential emissions of each individual HAP of EP-19 were determined.

Permit 022000-003 requires a wet scrubber control device be used at all times when the glue handling process (EP-19) is in operation and determined the wet scrubber has a control efficiency of 65 percent. Therefore, a control efficiency of 65 percent was applied to the VOC and volatile HAP emissions.

Momentive 4720H has a 73 weight percent of solids content. Permit 022000-003 determined based on the design of the glue handling hood and application method of the glue that there is a 100 percent capture efficiency for solids, therefore, there are no PM, PM<sub>10</sub>, or PM<sub>2.5</sub> emissions from this application.

The following table provides an emissions summary for this project. Existing potential emissions were taken from Permit 062007-006. Existing actual emissions were taken from the installation's 2011 EIQ. Potential emissions of the application represent the potential of the modified equipment, assuming continuous operation (8760 hours per year).

Table 2: Emissions Summary (tons per year)

Pollutant	Regulatory <i>De Minimis</i> Levels <sup>[1]</sup>	Existing Potential Emissions	Existing Actual Emissions (2011 EIQ)	Potential Emissions of the Application	New Installation Conditioned Potential
PM	25.0	N/A	N/A	N/A	N/A
PM <sub>10</sub>	15.0	157.53	34.72	N/A	N/A
PM <sub>2.5</sub>	10.0	N/A	7.02	N/A	N/A
SOx	40.0	1.1	3.02	N/A	N/A
NOx	40.0	30.3	26.63	N/A	N/A
VOC	40.0	28.02	2.01	14.72	N/A
CO	100.0	222.6	72.63	N/A	N/A
GHG (CO <sub>2</sub> e)	75,000 / 100,000	N/A	N/A	N/A	N/A
GHG (mass)	0.0 / 100.0 / 250.0	N/A	N/A	N/A	N/A
HAPs	10.0/25.0	6.82	N/A	1.77	N/A
Formaldehyde	2.0	N/A	N/A	0.88	N/A
Methanol	10.0	N/A	N/A	0.88	N/A

N/A = Not Applicable; N/D = Not Determined

<sup>1</sup> For Individual HAPS the SMAL was used

### PERMIT RULE APPLICABILITY

This review was conducted in accordance with Section (5) of Missouri State Rule 10 CSR 10-6.060, *Construction Permits Required*. Potential emissions of all pollutants are below de minimis levels.

## APPLICABLE REQUIREMENTS

Havco Wood Products, Inc. shall comply with the following applicable requirements. The Missouri Air Conservation Laws and Regulations should be consulted for specific record keeping, monitoring, and reporting requirements. Compliance with these emission standards, based on information submitted in the application, has been verified at the time this application was approved. For a complete list of applicable requirements for your installation, please consult your operating permit.

### GENERAL REQUIREMENTS

- *Submission of Emission Data, Emission Fees and Process Information*, 10 CSR 10-6.110
- *Restriction of Particulate Matter to the Ambient Air Beyond the Premises of Origin*, 10 CSR 10-6.170
- *Operating Permits*, 10 CSR 10-6.065
- *Restriction of Emission of Visible Air Contaminants*, 10 CSR 10-6.220
- *Restriction of Emission of Odors*, 10 CSR 10-6.165

### STAFF RECOMMENDATION

On the basis of this review conducted in accordance with Section (5), Missouri State Rule 10 CSR 10-6.060, *Construction Permits Required*, I recommend this permit be granted with special conditions.

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Janelle Lewis  
New Source Review Unit

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Date

### PERMIT DOCUMENTS

The following documents are incorporated by reference into this permit:

- The Application for Authority to Construct form, dated September 5, 2012, received September 5, 2012, designating Havco Wood Products, Inc. as the owner and operator of the installation.
- U.S. EPA document AP-42, *Compilation of Air Pollutant Emission Factors*, Fifth Edition.

Attachment A- Alternative Adhesives Potential to Emit Compliance Worksheet

Havco Wood Products, Inc.  
 Scott County S25, T30N, R13E  
 Project Number: 2012-09-010  
 Installation ID Number: 201-0021  
 Permit Number:

Column 1	Column 2 (a)	Column 3	Column 4 (b)	Column 5	Column 6 (f)	Column 7 (c)
Material Name	Maximum Hourly Design Rate (pounds per hour)	Individual HAP Content (weight %)	Individual HAP PTE (tons per year)	VOC (weight %)	VOC (ton per year) for the Material	Screen Modeling Action Level (tons per year)
<i>(example) new adhesive</i>	240	3.0%	11.03	5.0%	18.40	1.0

- a) Note: The maximum hourly design rate is equal to 240 pounds per hour.
- b)  $[\text{Column 2}] \times [\text{Column 3}] \times [4.38] \times [0.35] / 100 = [\text{Column 4}]$
- c) Screen Modeling Action Levels for individual HAPs can be found in Appendix B.
- d) Compare potential emissions of the individual HAP in [Column 4] to those from [Column 7]
- e) If [Column 4] is greater than [Column 7], then you must submit an applicability determination to the Air Pollution Control Program.
- f)  $[\text{Column 2}] \times [\text{Column 5}] \times [4.38] \times [0.35] / 100 = [\text{Column 6}]$
- g) If [Column 6] is greater than 14.72, then you must submit an applicability determination to the Air Pollution Control Program.

## APPENDIX A

### Abbreviations and Acronyms

<b>%</b> .....	percent	<b>m/s</b> .....	meters per second
<b>°F</b> .....	degrees Fahrenheit	<b>Mgal</b> .....	1,000 gallons
<b>acfm</b> .....	actual cubic feet per minute	<b>MW</b> .....	megawatt
<b>BACT</b> .....	Best Available Control Technology	<b>MHDR</b> .....	maximum hourly design rate
<b>BMPs</b> .....	Best Management Practices	<b>MMBtu</b> ....	Million British thermal units
<b>Btu</b> .....	British thermal unit	<b>MMCF</b> .....	million cubic feet
<b>CAM</b> .....	Compliance Assurance Monitoring	<b>MSDS</b> .....	Material Safety Data Sheet
<b>CAS</b> .....	Chemical Abstracts Service	<b>NAAQS</b> ...	National Ambient Air Quality Standards
<b>CEMS</b> .....	Continuous Emission Monitor System	<b>NESHAPs</b>	..... National Emissions Standards for Hazardous Air Pollutants
<b>CFR</b> .....	Code of Federal Regulations	<b>NO<sub>x</sub></b> .....	nitrogen oxides
<b>CO</b> .....	carbon monoxide	<b>NSPS</b> .....	New Source Performance Standards
<b>CO<sub>2</sub></b> .....	carbon dioxide	<b>NSR</b> .....	New Source Review
<b>CO<sub>2e</sub></b> .....	carbon dioxide equivalent	<b>PM</b> .....	particulate matter
<b>COMS</b> .....	Continuous Opacity Monitoring System	<b>PM<sub>2.5</sub></b> .....	particulate matter less than 2.5 microns in aerodynamic diameter
<b>CSR</b> .....	Code of State Regulations	<b>PM<sub>10</sub></b> .....	particulate matter less than 10 microns in aerodynamic diameter
<b>dscf</b> .....	dry standard cubic feet	<b>ppm</b> .....	parts per million
<b>EQ</b> .....	Emission Inventory Questionnaire	<b>PSD</b> .....	Prevention of Significant Deterioration
<b>EP</b> .....	Emission Point	<b>PTE</b> .....	potential to emit
<b>EPA</b> .....	Environmental Protection Agency	<b>RACT</b> .....	Reasonable Available Control Technology
<b>EU</b> .....	Emission Unit	<b>RAL</b> .....	Risk Assessment Level
<b>fps</b> .....	feet per second	<b>SCC</b> .....	Source Classification Code
<b>ft</b> .....	feet	<b>scfm</b> .....	standard cubic feet per minute
<b>GACT</b> .....	Generally Available Control Technology	<b>SIC</b> .....	Standard Industrial Classification
<b>GHG</b> .....	Greenhouse Gas	<b>SIP</b> .....	State Implementation Plan
<b>gpm</b> .....	gallons per minute	<b>SMAL</b> .....	Screening Model Action Levels
<b>gr</b> .....	grains	<b>SO<sub>x</sub></b> .....	sulfur oxides
<b>GWP</b> .....	Global Warming Potential	<b>SO<sub>2</sub></b> .....	sulfur dioxide
<b>HAP</b> .....	Hazardous Air Pollutant	<b>tph</b> .....	tons per hour
<b>hr</b> .....	hour	<b>tpy</b> .....	tons per year
<b>hp</b> .....	horsepower	<b>VMT</b> .....	vehicle miles traveled
<b>lb</b> .....	pound	<b>VOC</b> .....	Volatile Organic Compound
<b>lbs/hr</b> .....	pounds per hour		
<b>MACT</b> .....	Maximum Achievable Control Technology		
<b>µg/m<sup>3</sup></b> .....	micrograms per cubic meter		

## Appendix B: Table of Hazardous Air Pollutants and Screening Model Action Levels (May 3, 2012 Revision 10)

Chemical	CAS #	SMAL (ppb) (1)	Group (2)	VOC	PM	Chemical	CAS #	SMAL (ppb) (1)	Group (2)	VOC	PM	Chemical	CAS #	SMAL (ppb) (1)	Group (2)	VOC	PM
ACETALDEHYDE	75-07-0	8		Y	N	CARBARYL	83-26-2	10	V	Y	Y	DICHLOROPROPANE, [1,2-]	78-87-6	1		Y	N
ACETAMIDE	60-35-6	1		Y	N	CARBON DISULFIDE	75-15-0	1		Y	N	DICHLOROPROPENE, [1,3-]	542-75-6	1		Y	N
ACETONITRILE	75-05-8	4		Y	N	CARBON TETRACHLORIDE	55-23-5	1		Y	N	DICHLORVOS	62-73-7	0.2		Y	N
ACETOPHENONE	98-85-2	1		Y	N	CARBONYL SULFIDE	463-58-1	5		Y	N	DIETHANOLAMINE	111-42-2	5		Y	N
ACETYLAMINOFLUORINE, [2-]	53-98-3	0.005	V	Y	Y	CATECHOL	120-80-8	5		Y	N	DIETHYL SULFATE	64-87-5	1		Y	N
ACROLEIN	107-02-8	0.04		Y	N	CHLORAMBEN	133-90-4	1		Y	Y	DIETHYLENE GLYCOL MONOBUTYLETHER	112-34-5	5	F	Y	N
ACRYLAMIDE	78-05-1	0.02		Y	N	CHLORDANE	57-74-9	0.01		Y	Y	DIMETHOXYBENZIDINE, [3,3-]	118-90-4	0.1	V	Y	Y
ACRYLIC ACID	78-10-7	0.6		Y	N	CHLORINE	7782-50-5	0.1	N	N	N	DIMETHYL BENZIDINE, [3,3-]	118-93-7	0.008	V	Y	Y
ACRYLONITRILE	107-13-1	0.3		Y	N	CHLOROACETIC ACID	78-11-8	0.1		Y	N	DIMETHYL CARBAMOYL CHLORIDE	78-44-7	0.02		Y	N
ALLYL CHLORIDE	107-05-1	1		Y	N	CHLOROACETOPHENONE, [2-]	532-27-4	0.05		Y	N	DIMETHYL FORMAMIDE	68-12-2	1		Y	N
AMINOBIPHENYL, [4-]	92-67-1	1	V	Y	N	CHLOROBENZENE	108-90-7	10		Y	N	DIETHYL HYDRAZINE, [1,1-]	57-14-7	0.008		Y	N
ANILINE	62-53-3	1		Y	N	CHLOROBENZILATE	510-15-6	0.4	V	Y	Y	DIETHYL PHTHALATE	131-11-3	10		Y	N
ANISIDINE, [ORTHO-]	90-04-0	1		Y	N	CHLOROFORM	67-66-3	0.8		Y	N	DIMETHYL SULFATE	77-78-1	0.1	Y	Y	N
ANTHRACENE	120-12-7	0.01	V	Y	N	CHLOROMETHYL METHYLETHER	107-30-2	0.1		Y	N	DIMETHYLAMINOAZOBENZENE, [4-]	80-11-7	1		Y	N
ANTIMONY COMPOUNDS		5	H	N	Y	CHLOROPRENE	128-88-8	1		Y	N	DIMETHYLANILINE, [N-N-]	121-65-7	1		Y	N
ANTIMONY PENTAFLUORIDE	7783-70-2	0.1	H	N	Y	CHROMIUM (VI) COMPOUNDS		0.002	L	N	Y	DINITRO-O-CRESOL, [4,6-] (Note 5)	534-52-1	0.1	B	V	Y
ANTIMONY POTASSIUM TARTRATE	28300-74-5	1	H	N	Y	CHROMIUM COMPOUNDS		5	L	N	Y	DINITROPHENOL, [2,4-]	51-28-5	1		Y	N
ANTIMONY TRIOXIDE	1309-64-4	1	H	N	Y	CHRYSENE	218-01-9	0.01	V	Y	N	DINITROTOLUENE, [2,4-]	121-14-2	0.02		Y	N
ANTIMONY TRISULFIDE	1345-04-6	0.1	H	N	Y	COBALT COMPOUNDS		0.1	M	N	Y	DIOXANE, [1,4-]	123-91-1	5		Y	N
ARSENIC COMPOUNDS		0.005	I	N	Y	COKE OVEN EMISSIONS	5007-45-2	0.03	N	Y	N	DIPHENYLHYDRAZINE, [1,2-]	122-65-7	0.09	V	Y	Y
ASBESTOS	1332-21-4	0	A	N	Y	CRESOL, [META-]	108-39-4	1	B	Y	N	DIPHENYLMETHANE DIISOCYANATE, [4,4-]	101-88-6	0.1	V	Y	N
BENZ[A]ANTHRACENE	56-55-3	0.01	V	Y	N	CRESOL, [ORTHO-]	95-49-7	1	B	Y	N	EPICHLOROHYDRIN	108-95-8	2		Y	N
BENZENE	71-43-2	2		Y	N	CRESOL, [PARA-]	106-44-5	1	B	Y	N	ETHOXYETHANOL, [2-]	110-90-5	10	F	Y	N
BENZIDINE	92-97-5	0.003	V	Y	N	CRESOLS, (MIXED ISOMERS)	1319-77-3	1	B	Y	N	ETHOXYETHYL ACETATE, [2-]	111-15-9	5	F	Y	N
BENZO[A]PYRENE	50-32-8	0.01	V	Y	N	CUMENE	98-92-8	10		Y	N	ETHYL ACRYLATE	140-88-5	1		Y	N
BENZO[B]FLUORANTHENE	205-99-2	0.01	V	Y	N	CYANIDE COMPOUNDS		0.1	O	Y	N	ETHYL BENZENE	100-41-4	10		Y	N
BENZO[K]FLUORANTHENE	207-08-9	0.01	V	Y	N	DDE	72-55-9	0.01	V	Y	Y	ETHYL CHLORIDE	75-00-3	10		Y	N
BENZOTRICHLORIDE	98-07-7	0.005		Y	N	DI(2-ETHYLHEXYL) PHTHALATE, (DEHP)	117-81-7	5		Y	N	ETHYLENE GLYCOL	107-21-1	10		Y	N
BENZYL CHLORIDE	100-44-7	0.1		Y	N	DIAMNITOTOLUENE, [2,4-]	95-80-7	0.02		Y	N	ETHYLENE GLYCOL MONOBUTYLETHER (Delisted)	111-75-2				
BERYLLIUM COMPOUNDS		0.008	J	N	Y	DIAZOMETHANE	334-88-3	1		Y	N	ETHYLENE GLYCOL MONOHEXYL ETHER	112-25-4	5	F	Y	N
BERYLLIUM SALTS		2E-05	J	N	Y	DIBENZO[A,H]ANTHRACENE	63-70-3	0.01	V	Y	N	ETHYLENE IMINE, [AZIRINE]	151-55-4	0.003		Y	N
BIPHENYL, [1,1-]	92-52-4	10	V	Y	N	DIOXINS/FURANS	6E-07	D,V	Y	N	ETHYLENE OXIDE	75-21-8	0.1		Y	N	
BIS(CHLOROETHYL)ETHER	111-44-4	0.05		Y	N	DIBENZOFURAN	132-84-9	5	V	Y	N	ETHYLENE THIOUREA	96-45-7	0.6		Y	Y
BIS(CHLOROMETHYL)ETHER	542-88-1	0.0003		Y	N	DIBROMO-3-CHLOROPROPANE, [1,2-]	95-12-8	0.01		Y	N	FORMALDEHYDE	50-00-0	2		Y	N
BROMOFORM	75-25-2	10		Y	N	DIBROMOMETHANE, [1,2-]	106-93-4	0.1		Y	N	GLYCOL ETHER (ETHYLENE GLYCOL ETHERS)		5	F	Y	N
BROMOMETHANE	74-83-9	10		Y	N	DIBUTYL PHTHALATE	84-74-2	10		Y	Y	GLYCOL ETHER (DIETHYLENE GLYCOL ETHERS)		5	F	Y	N
BUTADIENE, [1,3-]	106-99-0	0.07		Y	N	DICHLOROBENZENE, [1,4-]	106-48-7	3		Y	N	HEPTACHLOR	78-44-8	0.02		Y	N
BUTOXYETHANOL ACETATE, [2-]	112-07-2	5	F	Y	N	DICHLOROBENZIDINE, [3,3-]	81-94-1	0.2	V	Y	Y	HEXACHLOROBENZENE	118-74-1	0.01		Y	N
BUTYLENE OXIDE, [1,2-]	106-89-7	1		Y	N	DICHLOROETHANE, [1,1-]	75-34-3	1		Y	N	HEXACHLOROBUTADIENE	87-88-3	0.9		Y	N
CADMIUM COMPOUNDS		0.1	K	N	Y	DICHLOROETHYLENE, [1,1-]	107-06-2	0.8		Y	N	HEXACHLOROCYCLOHEXANE, [ALPHA-]	319-84-6	0.01	F	Y	N
CALCIUM CYANAMIDE	156-82-7	10		Y	Y	DICHLOROETHYLENE, [1,1-]	75-35-4	0.4		Y	N	HEXACHLOROCYCLOHEXANE, [BETA-]	319-85-7	0.01	F	Y	N
CAPROLACTAM (Delisted)	105-60-2					DICHLOROMETHANE	75-05-2	10	N	N	N	HEXACHLOROCYCLOHEXANE, [DELTA-]	319-85-9	0.01	F	Y	N
CAPTAN	133-05-2	10		Y	Y	DICHLOROPHOENOXACETIC ACID, [2,4-]	94-75-7	10	C	Y	Y	HEXACHLOROCYCLOHEXANE, [TECHNICAL]	608-73-1	0.01	F	Y	N

## Appendix B: Table of Hazardous Air Pollutants and Screening Model Action Levels (May 3, 2012 Revision 10)

Chemical	CAS #	SMAL (ppb) (1)	Group ID	VOC	PM	Chemical	CAS #	SMAL (ppb) (1)	Group ID	VOC	PM	Chemical	CAS #	SMAL (ppb) (1)	Group ID	VOC	PM
HEXACHLOROCYCLOPENTADIENE	77-47-4	0.1		Y	N	NITROSODIMETHYLAMINE, [N-]	82-76-9	0.001		Y	N	TRIMETHYLPENTANE, [2,2,4-]	640-84-1	5		Y	N
HEXACHLORODETHANE	87-72-1	5		Y	N	NITROSODIETHANOLAMINE, [N-]	88-89-2	1		Y	N	URETHANE (ETHYL CARBAMATE)	51-78-6	0.8		Y	N
HEXAMETHYLENE-1,5-DIISOCYANATE	822-06-0	0.02		Y	N	NITROSO-N-METHYLUREA, [N-]	88-89-5	0.0002		Y	N	VINYL ACETATE	108-05-4	1		Y	N
HEXAMETHYLPHOSPHORAMIDE	680-31-8	0.01		Y	N	OCTACHLORONAPHTHALENE	2234-13-1	0.01	V	Y	N	VINYL BROMIDE	693-80-2	0.8		Y	N
HEXANE [N-]	110-54-3	10		Y	N	PARATHION	56-38-2	0.1		Y	Y	VINYL CHLORIDE	75-01-4	0.2		Y	N
HYDRAZINE	30201-2	0.004		N	N	PCB (POLYCHLORINATED BIPHENYLS)	1336-36-3	0.008	X	Y	Y	XYLENE, [META-]	108-38-3	10	G	Y	N
HYDROGEN CHLORIDE	7647-01-0	10		N	N	PENTACHLORONITROBENZENE	82-68-8	0.3		Y	N	XYLENE, [ORTHO-]	85-47-8	10	G	Y	N
HYDROGEN FLUORIDE	7664-39-3	0.1		N	N	PENTACHLOROPHENOL	87-88-6	0.7		Y	N	XYLENE, [PARA-]	106-42-3	10	G	Y	N
HYDROQUINONE	123-31-8	1		Y	N	PHENOL	108-95-2	0.1		Y	N	XYLENES (MIXED ISOMERS)	1330-20-7	10	G	Y	N
INDENO(1,2,3-CD)PYRENE	183-36-6	0.01	V	Y	N	PHENYLENE DIAMINE, [PARA-]	106-50-3	10		Y	N						
ISOPHORONE	78-59-1	10		Y	N	PHOSGENE	75-44-5	0.1		Y	N						
LEAD COMPOUNDS		0.01	Q	N	Y	PHOSPHINE	7803-61-2	5		N	N						
LINDANE (3,4,5,6,7,8-HEXACHLOROCYCLOHEXANE)	56-88-9	0.01	F	Y	N	PHOSPHOROUS (YELLOW OR WHITE)	7723-14-0	0.1		N	N	Legend					
MALEIC ANHYDRIDE	108-31-8	1		Y	N	PHTHALIC ANHYDRIDE	85-44-8	5		Y	N	Group ID	Aggregate Group Name				
MANGANESE COMPOUNDS		0.8	R	N	Y	POLYCYCLIC ORGANIC MATTER		0.01	V	Y	N	A	Asbestos				
MERCURY COMPOUNDS		0.01	S	N	N	PROPANE SULFONE, [1,3-]	1120-71-4	0.03		Y	Y	B	Cresols/Cresylic Acid (isomers and mixtures)				
METHANOL	67-58-1	10		Y	N	PROPIOLACTONE, [BETA-]	57-57-8	0.1		Y	N	C	2,4 - D, Salts and Esters				
METHOXYCHLOR	72-43-5	10	V	Y	Y	PROPIONALDEHYDE	123-38-6	5		Y	N	D	Dibenzofurans, Dibenzodioxins				
METHOXYETHANOL, [2-]	108-95-4	10	P	Y	N	PROPOLUR (BAYCON)	114-26-1	10		Y	Y	E	4,6 Dinitro-cresol, and Salts				
METHYL CHLORIDE	74-87-3	10		Y	N	PROPYLENE OXIDE	75-56-9	5		Y	N	F	Lindane (all isomers)				
METHYLETHYL KETONE (Delisted)	78-93-3					PROPYLENEIMINE, [1,2-]	75-55-8	0.003		Y	N	G	Xylenes (all isomers and mixtures)				
METHYL HYDRAZINE	60-34-4	0.05		Y	N	QUINOLINE	81-22-5	0.006		Y	N	H	Antimony Compounds				
METHYLOXIDE	74-89-4	1		Y	N	QUINONE	108-51-4	5		Y	N	I	Arsenic Compounds				
METHYLISOBUTYL KETONE	108-10-1	10		Y	N	RADIONUCLIDES		Note 1	Y	N	Y	J	Beryllium Compounds				
METHYL ISOCYANATE	824-83-8	0.1		Y	N	SELENIUM COMPOUNDS		0.1	W	N	Y	K	Cadmium Compounds				
METHYLMETHACRYLATE	80-52-6	10		Y	N	STYRENE	100-42-8	1		Y	N	L	Chromium Compounds				
METHYL TERT-BUTYL ETHER	1834-044	10		Y	N	STYRENE OXIDE	96-09-3	1		Y	N	M	Cobalt Compounds				
METHYLCYCLOPENTADIENYL MANGANESE	12108-13-3	0.1	R	N	Y	TETRACHLOROIBENZO-F-DIOXIN [2,3,7,8]	1746-01-6	6E-07	D/V	Y	Y	N	N	Coke Oven Emissions			
METHYLENE BIS(2-CHLOROANILINE), [4,4-]	101-144	0.2	V	Y	Y	TETRACHLOROETHANE, [1,1,2,2-]	79-34-5	0.3		Y	N	O	Cyanide Compounds				
METHYLENEDIANILINE, [4,4-]	101-77-8	1	V	Y	N	TETRACHLOROETHYLENE	127-18-4	10		N	N	P	Glycol Ethers				
METHYLNAPHTHALENE, [2-]	91-57-8	0.01	V	Y	N	TITANIUM TETRACHLORIDE	7550-45-0	0.1		N	N	Q	Lead Compounds (except elemental Lead)				
MINERAL FIBERS		0	T	N	Y	TOLUENE	108-88-3	10		Y	N	R	Manganese Compounds				
NAPHTHALENE	91-20-3	10	V	Y	N	TOLUENE DIISOCYANATE, [2,4-]	584-84-9	0.1		Y	N	S	Mercury Compounds				
NAPHTHYLAMINE, [ALPHA-]	134-32-7	0.01	V	Y	N	TOLUIDINE, [ORTHO-]	85-53-4	4		Y	N	T	Fine Mineral Fibers				
NAPHTHYLAMINE, [BETA-]	91-59-8	0.01	V	Y	N	TOXAPHENE	8001-35-2	0.01		Y	N	U	Nickel Compounds				
NICKEL CARBONYL	13463-39-3	0.1	U	N	Y	TRICHLOROETHANE, [1,1,2,4-]	120-82-1	10		Y	N	V	Polycyclic Organic Matter				
NICKEL COMPOUNDS		1	U	N	Y	TRICHLOROETHANE, [1,1,1,1-]	71-65-8	10		N	N	W	Selenium Compounds				
NICKEL REFINERY DUST		0.08	U	N	Y	TRICHLOROETHANE, [1,1,2-]	79-00-5	1		Y	N	X	Polychlorinated Biphenyls (Aroclors)				
NICKEL SUBSULFIDE	12036-72-2	0.04	U	N	Y	TRICHLOROETHYLENE	79-01-8	10		Y	N	Y	Radionuclides				
NITROBENZENE	98-96-3	1		Y	N	TRICHLOROPHENOL, [2,4,6-]	85-85-4	1		Y	N						
NITROBIPHENYL, [4-]	82-93-3	1	V	Y	N	TRICHLOROPHENOL, [2,4,6-]	88-06-2	5		Y	N						
NITROPHENOL, [4-]	100-02-7	5		Y	N	TRITHYLAMINE	121-44-8	10		Y	N						
NITROPROPANE, [2-]	79-46-9	1		Y	N	TRIP LURALIN	1582-09-6	9		Y	Y						

Notes

Note 1: The SMAL for radionuclides is defined as the effective dose equivalent to 0.3 millirems per year for 7 years exposure associated with a cancer risk of 1 in 1 million.

Mr. Dave Lowes  
Maintenance Supervisor  
Havco Wood Products, Inc.  
P.O. Box 1342  
Cape Girardeau, MO 63702

RE: New Source Review Permit - Project Number: 2012-09-010

Dear Mr. Lowes:

Enclosed with this letter is your permit to construct. Please study it carefully and refer to Appendix A for a list of common abbreviations and acronyms used in the permit. Also, note the special conditions on the accompanying pages. The document entitled, "Review of Application for Authority to Construct," is part of the permit and should be kept with this permit in your files. Operation in accordance with these conditions, your new source review permit application and with your operating permit is necessary for continued compliance. The reverse side of your permit certificate has important information concerning standard permit conditions and your rights and obligations under the laws and regulations of the State of Missouri.

If you have any questions regarding this permit, please do not hesitate to contact me at the Department of Natural Resources' Air Pollution Control Program, P.O. Box 176, Jefferson City, MO 65102, or by telephone at (573) 751-4817. Thank you for your attention to this matter.

Sincerely,

AIR POLLUTION CONTROL PROGRAM

Susan Heckenkamp  
New Source Review Unit Chief

SH:ljk

Enclosures

c: Southeast Regional Office  
PAMS File: 2012-09-010

Permit Number: