



Missouri Department of dnr.mo.gov

# NATURAL RESOURCES

Eric R. Greitens, Governor

Carol S. Comer, Director

OCT 17 2017

Mr. Mark Hays  
Regional Manager  
Mid Am Building Supply, Inc.  
1615 Omar Bradley Drive  
Moberly, MO 65270

RE: New Source Review Permit Amendment - Permit Number: 112014-002  
Project Number: 2015-05-021; Installation Number: 175-0082

Dear Mr. Hayes:

Since the issuance of Permit No. 112004-002, Mid Am Building Supply, Inc. (Mid Am) has requested authority to use several coatings that were not evaluated as a part of the original permit. The original permit contained alternative coating conditions that established upper limits on density and VOC content for future interior and exterior coatings (see Special Conditions 3.B, 3.C, 4, and 5). The thought was that this would give Mid-Am the flexibility to use alternative coatings while at the same time establishing upper bounds on the project's VOC, HAP and particulate potential emissions.

Prior to this amendment, when considering the use of a new coating, Mid-Am was required to complete recordkeeping sheets given in Permit No 112004-002. If the sheets showed that no limits were exceeded, then Mid-Am was free to use the coating as long as the appropriate recordkeeping sheets were maintained. If the records showed that limits were exceeded, then the coating was not allowed to be used at the facility without further evaluation by the Air Pollution Control Program.

For this installation, the calculations needed to determine the potential emissions are not straightforward. There are multiple coating booths, multiple product types (doors and trim), and multiple coating lines (exterior versus interior). With each product, the product could have one color coating with one or two top coats. For each coating, the amount of coating to an additive such as a catalyst can vary.

Due to the complexities in the project PTE calculations and the frequency of exceeding the original density and VOC limits laid out in the alternative recordkeeping Mid-Am has requested based on the advice of the program to amend the permit in order to remove the specific limits on alternative coatings and replace it with an installation-wide VOC, individual HAP, and total HAPs limits. The actual VOC emissions in 2016 for the facility were 3.73 tons. Therefore, maintaining the facility below a 40 tpy VOC limit and 10 tpy individual and 25 tpy combined HAP limits should be easily accomplished.



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Mr. Mark Hays  
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Alternative coatings will still be allowed. They will be tracked in order to keep the list of coatings used current and to aid the inspectors and other program personnel in ensuring that VOC and HAP emissions are properly being accounted for.

Please replace the special conditions of Permit No. 112014-002 with the following special conditions w. In addition, please remove the attachments from the existing permit and replace them with the following Attachment A, B, C and D.

If you were adversely affected by this permit decision, you may be entitled to pursue an appeal before the administrative hearing commission pursuant to Sections 621.250 and 643.075.6 RSMo. To appeal, you must file a petition with the administrative hearing commission within thirty 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 administrative hearing commission, whose contact information is: Administrative Hearing Commission, United States Post Office Building, 131 West High Street, Third Floor, P.O. Box 1557, Jefferson City, Missouri 65102, phone: 573-751-2422, fax: 573-751-5018, website: [www.oa.mo.gov/ahc](http://www.oa.mo.gov/ahc).

If you have any questions regarding this amendment, please do not hesitate to contact Susan Heckenkamp, at the department's Air Pollution Control Program, P.O. Box 176, Jefferson City, MO 65102 or at (573) 751-4817. Thank you for your attention to this matter.

Sincerely,

AIR POLLUTION CONTROL PROGRAM



Kendall B. Hale  
Permits Section Chief

KBH:shj

Enclosures

c: Northeast Regional Office  
PAMS File: 2015-05-021

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Permit No.	112014-002A
Project No.	2015-05-021

**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."*

Mid-Am Building Supply, Inc.  
 Randolph County, S7,T53N, R13W

1. Superseding Condition
  - A. The conditions of this amendment supersede all of the special conditions found in the previously issued construction permit 112014-002 issued by the Air Pollution Control Program.
  
2. Control Device Requirement-Baghouse
  - A. Mid Am Building Supply, Inc. shall control emissions from the following equipment using control devices as specified in Table 1 and the permit application.

Table 1: Controlled Equipment

Emission Unit ID	Equipment Description	Control Device Description	Control Device ID
EU1	Open Front Paint Booth	Fabric filter	CD1
EU4	Sanding and Prepping	Fabric filter	CD4
EU6	Open Front Paint Booth	Fabric filter	CD6
EU8	Trim Line Denibber	Dust collector	CD8
EU9	Trim Line Coating Booth	Pocket filters	CD9
EU11	Door Line Coating Booth	Bag and blanket filters	CD11
EU13	Door Line Scuff Booth	Dust collector	CD13

- B. The control devices shall be operated and maintained in accordance with the manufacturer's specifications
  
- C. Replacement filters for the control devices shall be kept on hand at all times. The filters shall be made of materials appropriate for operating conditions expected to occur (i.e. temperature limits, acidic and alkali resistance, and abrasion resistance).
  
- D. Mid Am Building Supply, Inc. shall maintain a copy of the manufacturer's performance warranty for each control device on site.

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**SPECIAL CONDITIONS:**

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

- E. Mid Am Building Supply, Inc. shall maintain an operating and maintenance log for the control device which shall include the following:
  - 1) Incidents of malfunction, with impact on emissions, duration of event, probable cause, and corrective actions; and
  - 2) Maintenance activities, with inspection schedule, repair actions, and replacements, etc.
  
- 3. VOC and HAPs Emission Limitations
  - A. Mid Am Building Supply, Inc. shall emit less than 40.0 tons of VOCs in any consecutive 12-month period from the entire installation (see Table 3 below).
  
  - B. Mid Am Building Supply, Inc. shall emit less than the SMAL given in Appendix B for each individual HAP and less than 25.0 tons of combined HAPs in any consecutive 12-month period from the entire installation (see Table 3 below).

Table 3: Equipment List

Emission Unit ID	Unit Description
EU1	Colmet open front paint booth
EU2	Colmet convection drying chamber (natural gas)
EU4	Sanding and prepping
EU5	Paint booth air exchange unit (natural gas)
EU6	GFS open front paint booth
EU7	Air exchange unit (natural gas)
EU8	Deimco lineal trim line denibber
EU9	Deimco lineal trim line coating booth
EU10	Deimco lineal trim line IR/ convection oven (electric)
EU11	Deimco horizontal door line coating booth
EU12	Deimco horizontal door line IR/ convection oven (electric)
EU13	Horizontal door line scuff booth

- C. Attachment A, Attachment B and Attachment C or equivalent forms, such as electronic forms, approved by the Air Pollution Control Program shall be used to demonstrate compliance with Special Conditions 3.A and 3.B.
  
- 4. Use of Alternative Coatings
  - A. Mid Am Building Supply, Inc. may use alternative coatings to be used in the equipment outlined in Table 3.

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**SPECIAL CONDITIONS:**

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

- B. All new coatings used after the issuance of this amendment must be evaluated for HAP and VOCs using Attachment D. Mid Am Building Supply, Inc. shall maintain on site a copy of the completed Attachment D for each alternative coating used. Mid Am Building Supply, Inc. shall also maintain on site a copy of the manufacturer's documentation used (such as an SDS or Regulatory Report) to fill in the Attachment D.
  - C. The limits applied to the installation in Special Conditions 3 will include emissions from the use of any new coatings. Their emissions shall be accounted for in Attachments A, B, and C.
5. Operational Requirement – Coating
- A. Mid Am Building Supply, Inc. shall keep the coatings, solvents and cleaning solutions in sealed containers whenever the materials are not in use. Mid Am Building Supply, Inc. shall provide and maintain suitable, easily read, permanent markings on all coating, solvent and cleaning solution containers used with this equipment.
6. Record Keeping and Reporting Requirements
- A. Mid Am Building Supply, 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. Mid Am Building Supply, Inc. shall report to the Air Pollution Control Program's Compliance/Enforcement Section, P.O. Box 176, Jefferson City, MO 65102, no later than 10 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.



## Attachment A - VOC Compliance Worksheet

<b>Natural Gas Combustion</b>	
<b>Emission Points</b>	<b>VOC Emissions<sup>5</sup> (lb/month)</b>
EU2, EU5, EU7	25.4
<b>Installation Monthly VOC Emissions<sup>6</sup> (lb/month):</b>	
<b>Installation Monthly VOC Emissions<sup>7</sup> (tons/month):</b>	
<b>Installation 12-Month Rolling Total VOC Emissions<sup>8</sup> (tons):</b>	

<sup>5</sup> VOC Emissions (lb/month) = Monthly Fuel Usage (MMscf) x VOC Emission Factor (lb/MMscf).

<sup>6</sup> Installation Monthly VOC Emissions (lb/month) = the sum of all VOC Emissions (lb/month) from surface coating operations and natural gas combustion.

<sup>7</sup> Installation Monthly VOC Emissions (tons/month) = Installation Monthly VOC Emissions (lb/month) x 0.0005 (ton/lb).

<sup>8</sup> Installation 12-Month Rolling Total VOC Emissions (tons) = the sum of the 12 most recent Installation Monthly VOC Emissions (tons/month). **Installation 12-Month Rolling Total VOC Emissions of less than 40.0 tons indicates compliance with Special Condition 3.A.**



<b>Natural Gas Combustion</b>	
<b>Emission Points</b>	<b>HAP Emissions<sup>14</sup> (lb/month)</b>
EU2, EU5, EU7	8.73
<b>Installation Monthly HAP Emissions<sup>15</sup> (lb/month):</b>	
<b>Installation Monthly HAP Emissions<sup>16</sup> (tons/month):</b>	
<b>Installation 12-Month Rolling Total HAP Emissions<sup>17</sup> (tons):</b>	

<sup>14</sup> HAP Emissions (lb/month) = Potential emission of listed combustion sources (ton/yr) divided by 12 months.

<sup>15</sup> Installation Monthly HAP Emissions (lb/month) = the sum of all HAP Emissions (lb/month) from surface coating operations and natural gas combustion.

<sup>16</sup> Installation Monthly HAP Emissions (tons/month) = Installation Monthly HAP Emissions (lb/month) x 0.0005 (ton/lb).

<sup>17</sup> Installation 12-Month Rolling Total HAP Emissions (tons) = the sum of the 12 most recent Installation Monthly HAP Emissions (tons/month). **Installation 12-Month Rolling Total HAP Emissions of less than 25.0 tons indicates compliance with Special Condition 3.B.**



<b>Natural Gas Combustion</b>	
<b>Emission Points</b>	<b>HAP Emissions<sup>24</sup> (lb/month)</b>
EU2, EU5, EU7	8.7
<b>Installation Monthly HAP Emissions<sup>25</sup> (lb/month):</b>	
<b>Installation Monthly HAP Emissions<sup>26</sup> (tons/month):</b>	
<b>Installation 12-Month Rolling Total HAP Emissions<sup>27</sup> (tons):</b>	

<sup>24</sup> HAP Emissions (lb/month) = Potential emission of listed combustion sources (ton/yr) divided by 12 months.

<sup>25</sup> Installation Monthly HAP Emissions (lb/month) = the sum of all HAP Emissions (lb/month) from surface coating operations and natural gas combustion for the individual HAP listed.

<sup>26</sup> Installation Monthly HAP Emissions (tons/month) = Installation Monthly HAP Emissions (lb/month) x 0.0005 (ton/lb).

<sup>27</sup> Installation 12-Month Rolling Total HAP Emissions (tons) = the sum of the 12 most recent Installation Monthly HAP Emissions (tons/month). **Installation 12-Month Rolling Total HAP Emissions of less than the SMAL indicates compliance with Special Condition 3.B.**



## Appendix B: Air Pollution Control Program

### Table of Hazardous Air Pollutants and Screening Model Action Levels

Chemical	CAS #	SMAL tons/yr	Group ID	VOC	PM	Chemical	CAS #	SMAL tons/yr	Group ID	VOC	PM
ACETALDEHYDE	75-07-0	9		Y	N	CHLOROMETHYL METHYL ETHER	107-30-2	0.1		Y	N
ACETAMIDE	60-35-5	1		Y	N	CHLOROPRENE	126-99-8	1		Y	N
ACETONITRILE	75-05-8	4		Y	N	CHROMIUM (VI) COMPOUNDS		0.002	L	N	Y
ACETOPHENONE	98-86-2	1		Y	N	CHROMIUM COMPOUNDS		5	L	N	Y
ACETYLAMINOFLUORINE, [2-]	53-96-3	0.005	V	Y	Y	CHRYSENE	218-01-9	0.01	V	Y	N
ACROLEIN	107-02-8	0.04		Y	N	COBALT COMPOUNDS		0.1	M	N	Y
ACRYLAMIDE	79-06-1	0.02		Y	N	COKE OVEN EMISSIONS	8007-45-2	0.03	N	Y	N
ACRYLIC ACID	79-10-7	0.6		Y	N	CRESOL, [META-]	108-39-4	1	B	Y	N
ACRYLONITRILE	107-13-1	0.3		Y	N	CRESOL, [ORTHO-]	95-48-7	1	B	Y	N
ALLYL CHLORIDE	107-05-1	1		Y	N	CRESOL, [PARA-]	106-44-5	1	B	Y	N
AMINOBIIPHENYL, [4-]	92-67-1	1	V	Y	N	CRESOLS (MIXED ISOMERS)	1319-77-3	1	B	Y	N
ANILINE	62-53-3	1		Y	N	CUMENE	98-82-8	10		Y	N
ANISIDINE, [ORTHO-]	90-04-0	1		Y	N	CYANIDE COMPOUNDS		0.1	O	Y	N
ANTHRACENE	120-12-7	0.01	V	Y	N	DDE	72-55-9	0.01	V	Y	Y
ANTIMONY COMPOUNDS		5	H	N	Y	DI(2-ETHYLHEXYL) PHTHALATE, (DEHP)	117-81-7	5		Y	N
ANTIMONY PENTAFLUORIDE	7783-70-2	0.1	H	N	Y	DIAMINOTOLUENE, [2,4-]	95-80-7	0.02		Y	N
ANTIMONY POTASSIUM TARTRATE	28300-74-5	1	H	N	Y	DIAZOMETHANE	334-88-3	1		Y	N
ANTIMONY TRIOXIDE	1309-64-4	1	H	N	Y	DIBENZ(A,H)ANTHRACENE	53-70-3	0.01	V	Y	N
ANTIMONY TRISULFIDE	1345-04-6	0.1	H	N	Y	DIOXINS/FURANS		6E-07	D,V	Y	N
ARSENIC COMPOUNDS		0.005	I	N	Y	DIBENZOFURAN	132-64-9	5	V	Y	N
ASBESTOS	1332-21-4	0	A	N	Y	DIBROMO-3-CHLOROPROPANE, [1,2-]	96-12-8	0.01		Y	N
BENZ(A)ANTHRACENE	56-55-3	0.01	V	Y	N	DIBROMOETHANE, [1,2-]	106-93-4	0.1		Y	N
BENZENE	71-43-2	2		Y	N	DIBUTYL PHTHALATE	84-74-2	10		Y	Y
BENZIDINE	92-87-5	0.0003	V	Y	N	DICHLOROBENZENE, [1,4-]	106-46-7	3		Y	N
BENZO(A)PYRENE	50-32-8	0.01	V	Y	N	DICHLOROBENZIDENE, [3,3-]	91-94-1	0.2	V	Y	Y
BENZO(B)FLUORANTHENE	205-99-2	0.01	V	Y	N	DICHLOROETHANE, [1,1-]	75-34-3	1		Y	N
BENZO(K)FLUORANTHENE	207-08-9	0.01	V	Y	N	DICHLOROETHANE, [1,2-]	107-06-2	0.8		Y	N
BENZOTRICHLORIDE	98-07-7	0.006		Y	N	DICHLOROETHYLENE, [1,1-]	75-35-4	0.4		Y	N
BENZYL CHLORIDE	100-44-7	0.1		Y	N	DICHLOROMETHANE	75-09-2	10		N	N
BERYLLIUM COMPOUNDS		0.008	J	N	Y	DICHLOROPHENOXY ACETIC ACID, [2,4-]	94-75-7	10	C	Y	Y
BERYLLIUM SALTS		2E-05	J	N	Y	DICHLOROPROPANE, [1,2-]	78-87-5	1		Y	N
BIPHENYL, [1,1-]	92-52-4	10	V	Y	N	DICHLOROPROPENE, [1,3-]	542-75-6	1		Y	N
BIS(CHLOROETHYL)ETHER	111-44-4	0.06		Y	N	DICHLOROVOS	62-73-7	0.2		Y	N
BIS(CHLOROMETHYL)ETHER	542-88-1	0.0003		Y	N	DIETHANOLAMINE	111-42-2	5		Y	N
BROMOFORM	75-25-2	10		Y	N	DIETHYL SULFATE	64-67-5	1		Y	N
BROMOMETHANE	74-83-9	10		Y	N	DIETHYLENE GLYCOL MONOBUTYL ETHER	112-34-5	5	P	Y	N
BUTADIENE, [1,3-]	106-99-0	0.07		Y	N	DIMETHOXYBENZIDINE, [3,3-]	119-90-4	0.1	V	Y	Y
BUTOXYETHANOL ACETATE, [2-]	112-07-2	5	P	Y	N	DIMETHYL BENZIDINE, [3,3-]	119-93-7	0.008	V	Y	Y
BUTYLENE OXIDE, [1,2-]	106-88-7	1		Y	N	DIMETHYL CARBAMOYL CHLORIDE	79-44-7	0.02		Y	N
CADMIUM COMPOUNDS		0.01	K	N	Y	DIMETHYL FORMAMIDE	68-12-2	1		Y	N
CALCIUM CYANAMIDE	156-62-7	10		Y	Y	DIMETHYL HYDRAZINE, [1,1-]	57-14-7	0.008		Y	N
CAPROLACTAM (Delisted)	105-60-2					DIMETHYL PHTHALATE	131-11-3	10		Y	N
CAPTAN	133-06-2	10		Y	Y	DIMETHYL SULFATE	77-78-1	0.1		Y	N
CARBARYL	63-25-2	10	V	Y	Y	DIMETHYLAMINOAZOBENZENE, [4-]	60-11-7	1		Y	N
CARBON DISULFIDE	75-15-0	1		Y	N	DIMETHYLANILINE, [N-N-]	121-69-7	1		Y	N
CARBON TETRACHLORIDE	56-23-5	1		Y	N	DINITRO-O-CRESOL, [4,6-] (Note 6)	534-52-1	0.1	E	Y	Y
CARBONYL SULFIDE	463-58-1	5		Y	N	DINITROPHENOL, [2,4-]	51-28-5	1		Y	N
CATECHOL	120-80-9	5		Y	N	DINITROTOLUENE, [2,4-]	121-14-2	0.02		Y	N
CHLORAMBEN	133-90-4	1		Y	Y	DIOXANE, [1,4-]	123-91-1	6		Y	N
CHLORDANE	57-74-9	0.01		Y	Y	DIPHENYLHYDRAZINE, [1,2-]	122-66-7	0.09	V	Y	Y
CHLORINE	7782-50-5	0.1		N	N	DIPHENYLMETHANE DIISOCYANATE, [4,4-]	101-68-8	0.1	V	Y	N
CHLOROACETIC ACID	79-11-8	0.1		Y	N	EPICHLOROHYDRIN	106-89-8	2		Y	N
CHLOROACETOPHENONE, [2-]	532-27-4	0.06		Y	N	ETHOXYETHANOL, [2-]	110-80-5	10	P	Y	N
CHLOROBENZENE	108-90-7	10		Y	N	ETHOXYETHYL ACETATE, [2-]	111-15-9	5	P	Y	N
CHLOROBENZILATE	510-15-6	0.4	V	Y	Y	ETHYL ACRYLATE	140-88-5	1		Y	N
CHLOROFORM	67-66-3	0.9		Y	N	ETHYL BENZENE	100-41-4	10		Y	N

**Appendix B: Air Pollution Control Program**  
**Table of Hazardous Air Pollutants and Screening Model Action Levels**

Chemical	CAS #	SMAL tons/yr	Group ID	VOC	PM	Chemical	CAS #	SMAL tons/yr	Group ID	VOC	PM
ETHYL CHLORIDE	75-00-3	10		Y	N	NICKEL SUBSULFIDE	12035-72-2	0.04	U	N	Y
ETHYLENE GLYCOL	107-21-1	10		Y	N	NITROBENZENE	98-95-3	1		Y	N
ETHYLENE GLYCOL MONOBUTYL ETHER (Delisted)	111-76-2					NITROBIPHENYL, [4-]	92-93-3	1	V	Y	N
ETHYLENE GLYCOL MONOHEXYL ETHER	112-25-4	5	P	Y	N	NITROPHENOL, [4-]	100-02-7	5		Y	N
ETHYLENE IMINE [AZIRIDINE]	151-56-4	0.003		Y	N	NITROPROPANE, [2-]	79-46-9	1		Y	N
ETHYLENE OXIDE	75-21-8	0.1		Y	N	NITROSODIMETHYLAMINE, [N-]	62-75-9	0.001		Y	N
ETHYLENE THIOUREA	96-45-7	0.6		Y	Y	NITROSOMORPHOLINE, [N-]	59-89-2	1		Y	N
FORMALDEHYDE	50-00-0	2		Y	N	NITROSO-N-METHYLUREA, [N-]	684-93-5	0.0002		Y	N
GLYCOL ETHER (ETHYLENE GLYCOL ETHERS)		5	P	Y	N	OCTACHLORONAPHTHALENE	2234-13-1	0.01	V	Y	N
GLYCOL ETHER (DIETHYLENE GLYCOL ETHERS)		5	P	Y	N	PARATHION	56-38-2	0.1		Y	Y
HEPTACHLOR	76-44-8	0.02		Y	N	PCB [POLYCHLORINATED BIPHENYLS]	1336-36-3	0.009	X	Y	Y
HEXACHLOROBENZENE	118-74-1	0.01		Y	N	PENTACHLORONITROBENZENE	82-68-8	0.3		Y	N
HEXACHLOROBUTADIENE	87-68-3	0.9		Y	N	PENTACHLOROPHENOL	87-86-5	0.7		Y	N
HEXACHLOROCYCLOHEXANE, [ALPHA-]	319-84-6	0.01	F	Y	N	PHENOL	108-95-2	0.1		Y	N
HEXACHLOROCYCLOHEXANE, [BETA-]	319-85-7	0.01	F	Y	N	PHENYLENEDIAMINE, [PARA-]	106-50-3	10		Y	N
HEXACHLOROCYCLOHEXANE, [DELTA-]	319-86-8	0.01	F	Y	N	PHOSGENE	75-44-5	0.1		Y	N
HEXACHLOROCYCLOHEXANE, [TECHNICAL]	608-73-1	0.01	F	Y	N	PHOSPHINE	7803-51-2	5		N	N
HEXACHLOROCYCLOPENTADIENE	77-47-4	0.1		Y	N	PHOSPHOROUS (YELLOW OR WHITE)	7723-14-0	0.1		N	N
HEXACHLOROETHANE	67-72-1	5		Y	N	PHTHALIC ANHYDRIDE	85-44-9	5		Y	N
HEXAMETHYLENE,-1,6-DIISOCYANATE	822-06-0	0.02		Y	N	POLYCYCLIC ORGANIC MATTER		0.01	V	Y	N
HEXAMETHYLPHOSPHORAMIDE	680-31-9	0.01		Y	N	PROPANE SULTONE, [1,3-]	1120-71-4	0.03		Y	Y
HEXANE, [N-]	110-54-3	10		Y	N	PROPIOLACTONE, [BETA-]	57-57-8	0.1		Y	N
HYDRAZINE	302-01-2	0.004		N	N	PROPIONALDEHYDE	123-38-6	5		Y	N
HYDROGEN CHLORIDE	7647-01-0	10		N	N	PROPOXUR [BAYGON]	114-26-1	10		Y	Y
HYDROGEN FLUORIDE	7664-39-3	0.1		N	N	PROPYLENE OXIDE	75-56-9	5		Y	N
HYDROQUINONE	123-31-9	1		Y	N	PROPYLENEIMINE, [1,2-]	75-55-8	0.003		Y	N
INDENO(1,2,3CD)PYRENE	193-39-5	0.01	V	Y	N	QUINOLINE	91-22-5	0.006		Y	N
ISOPHORONE	78-59-1	10		Y	N	QUINONE	106-51-4	5		Y	N
LEAD COMPOUNDS		0.01	Q	N	Y	RADIONUCLIDES		Note 1	Y	N	Y
LINDANE [GAMMA- HEXACHLOROCYCLOHEXANE]	58-89-9	0.01	F	Y	N	SELENIUM COMPOUNDS		0.1	W	N	Y
MALEIC ANHYDRIDE	108-31-6	1		Y	N	STYRENE	100-42-5	1		Y	N
MANGANESE COMPOUNDS		0.8	R	N	Y	STYRENE OXIDE	96-09-3	1		Y	N
MERCURY COMPOUNDS		0.01	S	N	N	TETRACHLORODIBENZO-P-DIOXIN,[2,3,7,8]	1746-01-6	6E-07	D,V	Y	Y
METHANOL	67-56-1	10		Y	N	TETRACHLOROETHANE, [1,1,2,2-]	79-34-5	0.3		Y	N
METHOXYCHLOR	72-43-5	10	V	Y	Y	TETRACHLOROETHYLENE	127-18-4	10		N	N
METHOXYETHANOL, [2-]	109-86-4	10	P	Y	N	TITANIUM TETRACHLORIDE	7550-45-0	0.1		N	N
METHYL CHLORIDE	74-87-3	10		Y	N	TOLUENE	108-88-3	10		Y	N
METHYL ETHYL KETONE (Delisted)	78-93-3					TOLUENE DIISOCYANATE, [2,4-]	584-84-9	0.1		Y	N
METHYL HYDRAZINE	60-34-4	0.06		Y	N	TOLUIDINE, [ORTHO-]	95-53-4	4		Y	N
METHYL IODIDE	74-88-4	1		Y	N	TOXAPHENE	8001-35-2	0.01		Y	N
METHYL ISOBUTYL KETONE	108-10-1	10		Y	N	TRICHLOROBENZENE, [1,2,4-]	120-82-1	10		Y	N
METHYL ISOCYANATE	624-83-9	0.1		Y	N	TRICHLOROETHANE, [1,1,1-]	71-55-6	10		N	N
METHYL METHACRYLATE	80-62-6	10		Y	N	TRICHLOROETHANE, [1,1,2-]	79-00-5	1		Y	N
METHYL TERT-BUTYL ETHER	1634-04-4	10		Y	N	TRICHLOROETHYLENE	79-01-6	10		Y	N
METHYL CYCLOPENTADIENYL MANGANESE	12108-13-3	0.1	R	N	Y	TRICHLOROPHENOL, [2,4,5-]	95-95-4	1		Y	N
METHYLENE BIS(2-CHLOROANILINE), [4,4-]	101-14-4	0.2	V	Y	Y	TRICHLOROPHENOL, [2,4,6-]	88-06-2	6		Y	N
METHYLENEDIANILINE, [4,4-]	101-77-9	1	V	Y	N	TRIETHYLAMINE	121-44-8	10		Y	N
METHYLNAPHTHALENE, [2-]	91-57-6	0.01	V	Y	N	TRIFLURALIN	1582-09-8	9		Y	Y
MINERAL FIBERS		0	T	N	Y	TRIMETHYLPENTANE, [2,2,4-]	540-84-1	5		Y	N
NAPHTHALENE	91-20-3	10	V	Y	N	URETHANE [ETHYL CARBAMATE]	51-79-6	0.8		Y	N
NAPHTHYLAMINE, [ALPHA-]	134-32-7	0.01	V	Y	N	VINYL ACETATE	108-05-4	1		Y	N
NAPHTHYLAMINE, [BETA-]	91-59-8	0.01	V	Y	N	VINYL BROMIDE	593-60-2	0.6		Y	N
NICKEL CARBONYL	13463-39-3	0.1	U	N	Y	VINYL CHLORIDE	75-01-4	0.2		Y	N
NICKEL COMPOUNDS		1	U	N	Y	XYLENE, [META-]	108-38-3	10	G	Y	N
NICKEL REFINERY DUST		0.08	U	N	Y	XYLENES (MIXED ISOMERS)	1330-20-7	10	G	Y	N

## Appendix B: Air Pollution Control Program

### Table of Hazardous Air Pollutants and Screening Model Action Levels

Legend		Notes
Group ID		
A	Asbestos	2, 5
B	Cresols/Cresylic Acid (isomers and mixtures)	2, 5
C	2,4 - D, Salts and Esters	6
D	Dibenzofurans, Dibenzodioxins	10
E	4, 6 Dinitro-o-cresol, and Salts	6
F	Lindane (all isomers)	3, 5
G	Xylenes (all isomers and mixtures)	5, 12
H	Antimony Compounds	2, 4
I	Arsenic Compounds	2, 4, 18
J	Beryllium Compounds	2, 4
K	Cadmium Compounds	2, 4
L	Chromium Compounds	4, 11
M	Cobalt Compounds	2, 4
N	Coke Oven Emissions	2, 5
O	Cyanide Compounds	7, 16

Legend		Notes
P	Glycol Ethers	3, 5
Q	Lead Compounds (except elemental Lead)	2, 4, 8
R	Manganese Compounds	2, 4
S	Mercury Compounds	2, 4
T	Fine Mineral Fibers	1, 2, 5, 22
U	Nickel Compounds	2, 4
V	Polycyclic Organic Matter	3, 5
W	Selenium Compounds	2, 4
X	Polychlorinated Biphenyls (Aroclors)	10
Y	Radionuclides	2, 9, 24
Notes		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

#### NOTES:

- Note 1 Includes mineral fiber emissions from facilities manufacturing or processing glass, rock, or slag fibers (or other mineral derived fibers) of average diameter 1 micrometer or less.
- Note 2 Emissions of compounds in this aggregate group are combined for comparison to the Major Source Thresholds. Except for those compounds specifically listed, emissions of compounds in this aggregate group are also combined for comparison to the SMALs and RALs.
- Note 3 Emissions of compounds in this aggregate group are combined for comparison to the Major Source Thresholds but are not combined for comparison to the SMALs and RALs.
- Note 4 The total mass of the compound is used to determine emissions for comparison to the Major Source Thresholds. The mass of the metal portion of the compound is used to determine emissions for comparison to the SMALs and RALs.
- Note 5 The total mass of the compound is used to determine emissions for comparison to the SMALs, RALs, and Major Source Thresholds.
- Note 6 The total mass of the compound is used to determine emissions for comparison to the Major Source Thresholds. For these compounds, emissions within the same aggregate group are combined for comparison to the SMALs and RALs, and the 2,4-D portion of 2,4-D Salts and Esters and the Dinitro-ortho-cresol (DNOC) portion of 4,6 Dinitro-o-cresol Salts are used to determine emissions for comparison to the SMALs and RALs.
- Note 7 The total mass of the compound is used to determine emissions for comparison to the Major Source Thresholds. Except for those compounds specifically listed, emissions of cyanide compounds are combined and the mass of the cyanide portion (-C≡N) of the compound is used to determine emissions for comparison to the SMALs and RALs. For those compounds specifically listed in the table, emissions are not combined and the total mass of the compound is used for comparison to the SMALs and RALs.
- Note 8 Elemental lead is not considered a hazardous air pollutant. However, the lead portion of lead compounds (in addition to elemental lead) is considered a criteria pollutant and should be included in the lead criteria pollutant potential emissions calculations.
- Note 9 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.
- The RAL units for Dibenzodioxins/Dibenzofurans (Dioxins/Furans) and Polychlorinated biphenyls (PCBs) are picograms per cubic meter (pg/m<sup>3</sup>)
- For comparison to the Major Source Threshold combine emissions within each aggregate group and use the total mass of each compound.
- For comparison to the SMAL and RAL, emissions of polychlorinated dibenzodioxins & polychlorinated dibenzofurans (PCDD/PCDF) and polychlorinated biphenyls (PCB) are scaled according to the toxic equivalency factor method and then combined for comparison to the SMAL and RAL:
- Note 10 For comparison to the SMAL:
- 1) scale the annual emissions of each PCDD/PCDF and PCB by its respective toxic equivalency factor (TEF)
  - 2) after the emissions are scaled, combine them into a single potential annual emissions (tons/year) for comparison to the SMAL
- For comparison to the RAL:
- 1) scale the annual emissions of each PCDD/PCDF and PCB by its respective toxic equivalency factor (TEF)
  - 2) after the emissions are scaled, combine them into a single emission rate (lb/hr) or (grams/second) for modeling
  - 3) the resulting ambient concentration is compared to the RALs for Dioxins/Furans

## Appendix B: Air Pollution Control Program

### Table of Hazardous Air Pollutants and Screening Model Action Levels

#### Toxic Equivalency Factors for PCDD, PCDF, and PCB compounds

PCDDs	TEF	PCDFs	TEF	PCBs	TEF
2,3,7,8-TCDD	1.0	2,3,7,8-TCDF	0.1	3,3',4,4'-TCB (77)	0.0001
1,2,3,7,8-PeCDD	1.0	1,2,3,7,8-PeCDF	0.03	3,4,4',5'-TCB (81)	0.0003
1,2,3,4,7,8-HxCDD	0.1	2,3,4,7,8-PeCDF	0.3	3,3',4,4',5'-PeCB (126)	0.1
1,2,3,7,8,9-HxCDD	0.1	1,2,3,4,7,8-HxCDF	0.1	3,3',4,4',5,5'-HxCB (169)	0.03
1,2,3,6,7,8-HxCDD	0.1	1,2,3,7,8,9-HxCDF	0.1	2,3,3',4,4' PeCB (105)	0.00003
1,2,3,4,6,7,8-HpCDD	0.01	1,2,3,6,7,8-HxCDF	0.1	2,3,4,4',5 PeCB (114)	0.00003
1,2,3,4,6,7,8,9-OCDD	0.0003	2,3,4,6,7,8-HxCDF	0.1	2,3',4,4',5 PeCB (118)	0.00003
		1,2,3,4,6,7,8-HpCDF	0.01	2',3,4,4',5 PeCB (123)	0.00003
		1,2,3,4,7,8,9-HpCDF	0.01	2,3,3',4,4',5-HxCB (156)	0.00003
		1,2,3,4,6,7,8,9-OCDF	0.0003	2,3,3',4,4',5-HxCB (157)	0.00003
				2,3',4,4',5,5'-HxCB (167)	0.00003
				2,3,3',4,4',5,5'-HpCB (189)	0.00003

- Note 11 Emissions of compounds in this aggregate group are combined for comparison to the Major Source Thresholds. Chromium (VI) compounds, also known as hexavalent chromium compounds, are combined for comparison to the SMAL and RALs for Chromium (VI) compounds. Chromium Compounds of all other oxidation states [i.e. excluding Chromium (VI) Compounds] are combined for comparison to the SMALs and RALs for Chromium Compounds.
- Note 12 Emissions of all isomers of Xylenes are combined for comparison to the Major Source Thresholds. Although each isomer is specifically listed, they are not evaluated separately. Emissions of all isomers are combined and compared to the SMAL and RALs for any of the listed isomers as they are all the same.
- Note 13 The RAL units for asbestos are fibers/mL (or fibers per cm<sup>3</sup>)
- Note 14 The RAL units for Nitroso-N-Methylurea, [N-] (CAS # 684-93-5) are nanograms per cubic meter (ng/m<sup>3</sup>)
- Note 15 The 1-hour RAL for Dichloroethylether (CAS # 111-44-4) is 0.287 milligrams per cubic meter (mg/m<sup>3</sup>)
- Note 16 The 1-hour RAL for Cyanide Compounds is 11 milligrams per cubic meter (mg/m<sup>3</sup>)
- Note 17 The acute RAL for Hydrogen Fluoride (CAS # 7664-39-3) for an exposure period between one and 14 days is 16 micrograms per cubic meter (µg/m<sup>3</sup>)
- Note 18 The 4-hour RAL for Arsenic Compounds is 0.19 micrograms per cubic meter (mg/m<sup>3</sup>)
- Note 19 The 1-hour RAL for hydrogen chloride is 2,100 micrograms per cubic meter (mg/m<sup>3</sup>)
- Note 20 X'CN where X = H' or any other group where a formal dissociation may occur.  
For example KCN or Ca(CN)<sub>2</sub>
- Note 21 Glycol ethers include mono- and di-ethers of ethylene glycol, diethylene glycol, and triethylene glycol R-(OCH<sub>2</sub>CH<sub>2</sub>)<sub>n</sub>-OR'.  
Where:  
n = 1, 2, or 3;  
R = alkyl C7 or less; or  
R = phenyl or alkyl substituted phenyl;  
R' = H or alkyl C7 or less; or  
OR' consisting of carboxylic acid ester, sulfate, phosphate, nitrate, or sulfonate.
- Note 22 Fine mineral fibers include mineral fiber emissions from facilities manufacturing or processing glass, rock, or slag fibers (or other mineral derived fibers) of average diameter 1 micrometer or less.
- Note 23 POM includes organic compounds with more than one benzene ring, and which have a boiling point greater than or equal to 100°C
- Note 24 Radionuclides are a type of atom which spontaneously undergoes radioactive decay.

## Appendix B: Air Pollution Control Program

### Table of Hazardous Air Pollutants and Screening Model Action Levels

#### Column Identifiers

Column Name	Description
Chemical	As identified in section 112(b)(1) of the Clean Air Act Amendments of 1990, the name used in the Air Pollution Control Program's (APCP) Chemical Database to identify a Hazardous Air Pollutant (HAP) or an aggregate group of HAPs. The table lists HAPs in alphabetical order.
CAS #	The Chemical Abstracts Service (CAS) registry number for the HAP. In most instances, an aggregate group of HAPs does not have a CAS number because the purpose of a CAS number is to identify a specific chemical or compound.
SMAL	Screening Model Action Level (SMAL) is the emission threshold level for modeling HAPs, as referenced in the Missouri Code of State Regulations (CSR) 10 CSR 10-6.060 (12) (J) <i>Air Quality Analysis for Hazardous Air Pollutants</i> . The SMAL is also the emission threshold level for construction permit exemptions as referenced in 10 CSR 10-6.061 (3) (A) 3. B. Units are in tons per year except where noted.
8-HR RAL	The risk assessment level, as referred to in 10 CSR 10-6.060 (12) (J) <i>Air Quality Analysis for Hazardous Air Pollutants</i> , for an 8-hour averaging time. Units are in micrograms per cubic meter unless otherwise noted. Except where noted, modeled impacts must be below this number for any 8-hour time period.
24-HR RAL	The risk assessment level, as referred to in 10 CSR 10-6.060 (12) (J) <i>Air Quality Analysis for Hazardous Air Pollutants</i> , for a 24-hour averaging time. Units are in micrograms per cubic meter unless otherwise noted. Modeled impacts must be below this number for any 24-hour time period.
Annual RAL	The risk assessment level, as referred to in 10 CSR 10-6.060 (12) (J) <i>Air Quality Analysis for Hazardous Air Pollutants</i> , for an annual average. Units are in micrograms per cubic meter unless otherwise noted. Modeled impacts must be below this number for the 1-year time period, unless the HAP has a 10 X Annual RAL value.
10 X Annual RAL	This value represents ten times the annual RAL. EPA guidance (EPA-453/R-99-001, March, 1999) recommends that the HAPs whose cancer risk is due to chronic exposure (70-year lifetime exposure) must meet a lifetime cancer risk level in the range of 1-in-10,000 to 1-in-1,000,000. The Air Pollution Control Program allows a lifetime cancer risk level of 1-in-100,000 which corresponds to a maximum exposure level of 10 times the annual RAL.
Group ID	A value in this column indicates that the compound is classified as an aggregate group HAP. Emissions of compounds that are in the same aggregate group must be counted together.
VOC	If the value is Y, the HAP is classified as a Volatile Organic Compound (VOC) as defined in 10 CSR 10-6.020 (2) (V) 9. <i>Volatile Organic Compounds (VOC)</i> . If the value is N, the HAP is not classified as a VOC. Emissions of HAPs that are also VOCs are counted in the emissions potential for both HAPs and VOCs. VOC classification was determined based on guidance in a memo from the chief of the Air Permits and Compliance Branch of EPA Region VII to the director of the Air Pollution Control Program dated, April 18, 1996 and received, April 22, 1996.
PM	If the value is Y, the HAP is classified as particulate matter less than or equal to 10 microns in diameter (PM <sub>10</sub> ) as defined in 10 CSR 10-6.020 (2) (P) 4. B. <i>PM<sub>10</sub></i> . If the value is N, the HAP is not classified as a PM <sub>10</sub> . Emissions of HAPs that are also PM <sub>10</sub> are counted in the emissions potential for both HAPs and PM <sub>10</sub> . PM <sub>10</sub> classification was determined based on guidance in a memo from the chief of the Air Permits and Compliance Branch of EPA Region VII to the director of the Air Pollution Control Program dated, April 18, 1996 and received, April 22, 1996.
Synonyms	Synonyms are other names that may be used to identify the HAP. The following websites may also be helpful in identifying HAPs: More information on aggregate group HAPs can be found at this EPA website <a href="http://www.epa.gov/ttn/atw/agghapsmemo3.html">http://www.epa.gov/ttn/atw/agghapsmemo3.html</a> A comprehensive list of glycol ethers can be found at this EPA website <a href="http://www.epa.gov/ttn/atw/glycol2000.pdf">http://www.epa.gov/ttn/atw/glycol2000.pdf</a> More information on HAPs can be found at this EPA website <a href="http://www.epa.gov/ttn/atw/">http://www.epa.gov/ttn/atw/</a>

**Appendix C: Current list coatings at the time of this amendment**

Manufacturer	Coating Description	Coating ID
AkzoNobel	Ez White Mono B/C	64-W029-621
AkzoNobel	Ez Light Oak B/C	630-D029-367
AkzoNobel	Walnut Basecoat	630-D029-491
AkzoNobel	Medium Oak Basecoat	630-D029-493
AkzoNobel	Dark Oak Basecoat	630-D029-494
AkzoNobel	Chestnut Basecoat	630-D029-495
AkzoNobel	Medium Danish Walnut Basecoat	630-D029-514
AkzoNobel	Medium Teak Natural Basecoat	630-D029-515
AkzoNobel	Medium Fruitwood/Early American Basecoat	630-D029-516
AkzoNobel	Mahogany/Cherry Basecoat	630-R029-492
AkzoNobel	Dark Mahogany Basecoat	630-R029-513
AkzoNobel	High Load Black Wiping Stain	644-B029-304
AkzoNobel	Cherry/Walnut W/B Wiping Glaze	644-D029-186B
AkzoNobel	New Breeze Special Walnut Wiping Stain	644-D029-264B
AkzoNobel	High Load Burnt Umber Wiping Stain	644-D029-303
AkzoNobel	Dark Mahogany Glaze	644-D029-313
AkzoNobel	Medium Danish Walnut Glaze	644-D029-314
AkzoNobel	Medium Teak Natural Glaze	644-D029-315
AkzoNobel	Medium Fruitwood Glaze	644-D029-316
AkzoNobel	Medium Early American Glaze	644-D029-317
AkzoNobel	Waterbase Topcoat	684-30L029-19
AkzoNobel	Pecan Spray Stain	622-D029-18
AkzoNobel	General Purpose Primer	650-931A-H5001
AkzoNobel	Interior White Finish	660-1354-H5PBS
AkzoNobel	Clear Interior Finish	680-45L5W-1209
AkzoNobel	Almond	630-Y029-535
AkzoNobel	Bahama Brown Basecoat	630-D029-534
AkzoNobel	Beige Basecoat	630-D029-536
AkzoNobel	Black Basecoat	630-B029-539
AkzoNobel	Bronze Basecoat	630-D029-530
AkzoNobel	Eggshell Basecoat	630-W029-532
AkzoNobel	Green Basecoat	630-G029-531
AkzoNobel	Sandstone Basecoat	630-D029-537
AkzoNobel	Terratone Basecoat	630-D029-533
AkzoNobel	Wineberry Basecoat	630-R029-538
AkzoNobel	Red Oxide Glaze	64-R029-525
Sherwin Williams	Red Oxide Polane	F63RL500
Sherwin Williams	Polane, Black	F63BL504
Sherwin Williams	Polane, Yellow Oxide	F63YL500
Sherwin Williams	Polane, White	F63WL504
Sherwin Williams	Polane Catalyst	V66VL6
Sherwin Williams	Kem Aqua Colorant, Mid-Am Black	F73WXb17466
Sherwin Williams	Kem Aqua Colorant, Red Oxide	D59R506