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: 092017-012

Project Number: 2016-05-077
Installation Number: 151-0060

Parent Company: Classic Buildings LLC

Parent Company Address: 67 Progress Lane, Linn, MO 65051

Installation Name: Classic Buildings LLC

Installation Address: 67 Progress Lane, Linn, MO 65051

Location Information: Osage County, S21, T43N, R8W

Application for Authority to Construct was made for:
Surface coating and lumber sawing. This review was conducted in accordance with Section (5), Missouri State Rule 10 CSR 10-6.060, *Construction Permits Required*.

☐ Standard Conditions (on reverse) are applicable to this permit.

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

Prepared by
Chad Stephenson
New Source Review Unit

Director or Designee
Department of Natural Resources

SEP 27 2017
Effective Date

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 Enforcement and Compliance Section of 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 Enforcement and Compliance Section of the Department's Air Pollution Control Program of the anticipated date of start up of this (these) air contaminant sources(s). The information must be made available within 30 days of actual startup. Also, you must notify the Department's regional office responsible for the area within which you are located within 15 days after the actual start up of this (these) air contaminant source(s).

A copy of the permit application and this permit and permit review shall be kept at the installation address and shall be made available to Department's 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 using the contact information below.

Contact Information:
Missouri Department of Natural Resources
Air Pollution Control Program
P.O. Box 176
Jefferson City, MO 65102-0176
(573) 751-4817

The regional office information can be found at the following website:
http://dnr.mo.gov/regions/

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."

Classic Buildings LLC
Osage County, S21, T43N, R8W

1. Emission Limitation – Ethylene Glycol
   A. Classic Buildings LLC shall emit less than 10.0 tons of Ethylene Glycol in any consecutive 12-month period from the entire installation as defined in Table 1.

   B. Attachment A or equivalent forms, such as electronic forms, approved by the Air Pollution Control Program shall be used to demonstrate compliance with Special Condition 1.A.

Table 1: Installation Ethylene Glycol Emission Points

Emission Point	Description	Maximum Hourly Design Rate
EP-01	Booth Paint System with 17 paints guns (4 at once)	5.33 gallons/hour

2. Control Device Requirement-Filter
   A. Classic Buildings LLC shall control emissions from the booth paint guns using a filter media (EP-01) rated for at least 98.0 percent overspray removal efficiency as specified in the permit application.

   B. The filter media shall be operated and maintained in accordance with the manufacturer's specifications. The filter media shall be equipped with a gauge or meter, which indicates the pressure drop across the control device. These gauges or meters shall be located such that the Department of Natural Resources' employees may easily observe them.

   C. Replacement filters shall be kept on hand at all times. The filters shall be made of fibers appropriate for operating conditions expected to occur (i.e. temperature limits, acidic and alkali resistance, and abrasion resistance).

   D. Classic Buildings LLC shall monitor and record the operating pressure drop across the filter media at least once every 24 hours of operation. The operating pressure drop shall be maintained within the design conditions specified by the manufacturer's performance warranty.

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

E. Classic Buildings LLC shall maintain an operating and maintenance log for the filter media 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. Capture Device Requirement – Enclosed Booth
   A. Classic Buildings LLC shall capture all emissions from the surface coating (EU-01) applied with a totally enclosed booth and exhaust fan(s). Emissions from the booth shall be routed through the dust collector as stated in Special Condition 2.

   B. Negative pressure shall be demonstrated and recorded at all booth openings at least once every 24 hours using visual indication such as streamers, powder puff, smoke, or other method preapproved by the Air Pollution Control Program. 24-hour periods when spray applied surface coating is non-operational shall be recorded.

   C. Classic Buildings LLC shall operate the booth's exhaust fan(s) at all times surface coating is spray applied.

4. Use of Alternative Coating in the Booth Paint System
   A. When considering using an alternative coating in the Booth Paint System that is different than a material listed in the Application for Authority to Construct, Classic Buildings LLC shall calculate the potential emissions of all individual HAP and the combined volatile organic compounds (VOCs) in the alternative material.

   B. Classic Buildings LLC 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 A or if the potential emissions of VOCs exceed 40.0 tons per year.

   C. Attachment B or equivalent forms, such as electronic forms, approved by the Air Pollution Control Program shall be used to show compliance with Special Condition 4.A.

5. Operational Requirement
   A. Classic Buildings LLC shall keep the surface coatings in sealed containers whenever the materials are not in use. Classic Buildings LLC shall provide

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

and maintain suitable, easily read, permanent markings on all of the above containers used with this equipment.

6. Operational Requirement
   A. Classic Buildings LLC shall operate no more than four spray guns at a time inside the booth (EP-01).

7. Record Keeping and Reporting Requirements
   A. Classic Buildings LLC 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 SDS for all materials used.

   B. Classic Buildings LLC 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 shows an exceedance of a limitation imposed by this permit.

REVIEW OF APPLICATION FOR AUTHORITY TO CONSTRUCT AND OPERATE
SECTION (5) REVIEW
Project Number: 2016-05-077
Installation ID Number: 151-0060
Permit Number: 092017-012

Installation Address:
Classic Buildings LLC
67 Progress Lane
Linn, MO 65051

Parent Company:
Classic Buildings LLC
67 Progress Lane
Linn, MO 65051

Osage County, S21, T43N, R8W

REVIEW SUMMARY

- Classic Buildings LLC has applied for authority to construct a paint booth and lumber sawing operation used for making portable buildings and prefabricated 2-car garages.
- The application was deemed complete on October 19, 2016.
- HAP emissions are expected from the proposed equipment. HAPs of concern from this process are ethylene glycol (Chemical Abstracts Service (CAS) 107-27-1) and chromium compounds (CAS 1308-38-9).
- None of the New Source Performance Standards (NSPS) apply to the installation.
- 40 CFR 63 Subpart HHHHHH (MACT 6H) – National Emission Standards for Hazardous Air Pollutants: Paint Stripping and Miscellaneous Surface Coating Operations at Area Sources applies to this facility because the coating used contains chromium.
- Filtration media is being used to control the PM, PM_{10}, and $PM_{2.5}$ from the Paint Booth (EP-01).
- This review was conducted in accordance with Section (5) of Missouri State Rule 10 CSR 10-6.060, *Construction Permits Required*. Potential emissions of Ehylene Glycol are conditioned below de minimis levels.
- This installation is located in Osage 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 as a part of this permit.

- No Operating Permit is required for this installation.

- Approval of this permit is recommended with special conditions.

INSTALLATION/PROJECT DESCRIPTION

Classic Buildings LLC is an installation that constructs portable buildings and prefabricates 2-car garages. The facility is located at 67 Progress Lane in Linn, Missouri. They will be considered a de minimis source for construction permitting.

The facility has a paint booth (EP-01) that has four work stations for the spray application of water based acrylic paints. The paint booth is located in the main building and controlled by fabric filters. According to the applicant the facility can produce a maximum of 5 buildings daily. This is based on operating 9 hours per day. Buildings take an average of 3.5 gallons of paint each. There are 17 total paint guns, and a maximum of 4 people can be spray applying at one time. This is due to space limitations within the paint booth. For the worst case scenario building it takes 9.6 gallons of paint per building. This is equal to a maximum hourly design rate of 5.33 gallons of paint being used per hour or the equivalent of 46,720 gallons of paint when operating 8,760 hours per year. This is considered a conservative estimate since the facility estimates is uses 3,500 gallons of paint per year.

In addition to the paint booth, the facility also has a lumber cutting and sawing operation (EP-02). Buildings take an average of 2,160 board feet which is the equivalent of 1,200 board feet being used per hour based on a maximum of 5 buildings being produced in 9 hours. If the facility operated 8,760 hours in a year, 10,512,000 board feet would be used. According to the facility they use an average of 2,228,750 board feet yearly. Assuming 1board feet = 4 lbs; 10.512 million board feet equals 21,024 tons of lumber processed yearly or a maximum hourly design rate of 2.40 tons per hour.

There is one haul road for the facility that is unpaved and approximately 750 feet long. The road is used for receiving material (EP-3) and shipping finished buildings (EP-4) to customers.

No permits have been issued to Classic Buildings LLC from the Air Pollution Control Program. The facility is not new; however this is the first application for authority to construct the Air Pollution Control Program has received.

EMISSIONS/CONTROLS EVALUATION

The paint booth (EP-01) potential emissions are primarily VOCs and HAPs that are associated with the spray booth. Potential emissions for these processes were estimated using a mass balance approach and information obtained from the Safety Data Sheet (SDS) for Haley Paint Exterior 888XXXX and 880XXXSeries Colors. 100 percent of the VOC and non-PM_{10} HAP content of the coating mixtures are assumed to be emitted into the atmosphere. Conservatively, all solids were considered to be $PM_{2.5}$.

The Safety Data Sheet (SDS) listed the HAPs ethylene glycol and chromium compounds present in the coating. Assuming all HAPs present in the coating was emitted, the weight percent multiplied by the consumption rate of coating would estimate the amount of ethylene glycol and chromium compounds that could be released. Chromium compounds are considered particulate matter and the efficiency of the filter media control device was used to determine the amounts released. A controlled value of 100 percent capture was assumed with the enclosed booth and dust collectors. Control efficiency for PM, PM_{10} and $PM_{2.5}$ was assumed to be 98 percent since MACT 6H requires a minimum of 98 percent control efficiency. The transfer efficiency was taken from Table 5-7 *Transfer Efficiency for Different Spraying Methods and Surface Types*, from Air Pollution Technology Institute document, Sources and Control of Volatile Organic Air Pollutants, Third Edition. The facility uses both airless and air-atomized paint guns. Coating was assigned 50 percent solids transfer efficiency. Overspray solids are controlled by filter media. All surface coating emissions are considered to be emitted from the booth itself.

The emission factors for PM, PM_{10}, and $PM_{2.5}$ for the lumber sawing operation (EP-02) were obtained from WebFire (Factor Information Retrieval System), EPA's online emission factor repository, for the Source Classification Codes (SCC) 3-07-008-02. These emission factors are for log sawing. Emission factors for $PM_{2.5}$ were developed assuming that 50.0% of the PM_{10} generated from log sawing is $PM_{2.5}$.

Haul road emission factors were obtained from the Environmental Protection Agency (EPA) document AP-42, Section 13.2.2 *Unpaved Roads* (11/06).

The following table provides an emissions summary for this project and installation. There are no existing potential or actual emissions since this a newly permitted facility. Potential emissions of the application represent the potential of the new equipment, assuming continuous operation (8760 hours per year). All coatings are expected to have the same particulate matter, chromium, ethylene glycol, and VOC content so particulate matter, VOC and chromium were proportionally reduced in conditioned potential emissions.

Table 2: Emissions Summary (tpy)

Pollutant	Regulatory *De Minimis* Levels	Existing Potential Emissions	Existing Actual Emissions	Potential Emissions of the Project	New Installation Conditioned Potential
PM	25.0	N/A	N/A	8.33	8.10
PM_{10}	15.0	N/A	N/A	4.84	4.61
$PM_{2.5}$	10.0	N/A	N/A	3.10	2.87
SOx	40.0	N/A	N/A	N/A	N/A
NOx	40.0	N/A	N/A	N/A	N/A
VOC	40.0	N/A	N/A	29.22	25.81
CO	100.0	N/A	N/A	N/A	N/A
Combined HAPs	25.0	N/A	N/A	11.55	10.20
Chromium Compounds	5	N/A	N/A	0.23	0.20
Ethylene Glycol	10.0	N/A	N/A	11.32	<10.0

N/A = Not Applicable;

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 Ethylene Glycol are conditioned below de minimis levels.

APPLICABLE REQUIREMENTS

Classic Buildings LLC 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.

GENERAL REQUIREMENTS

- *Submission of Emission Data, Emission Fees and Process Information,* 10 CSR 10-6.110
    - Per 10 CSR 10-6.110(4)(B)2.B(II) and (4)(B)2.C(II) a full EIQ is required for the first full calendar year the equipment (or modifications) approved by this permit are in operation.

- *Restriction of Particulate Matter to the Ambient Air Beyond the Premises of Origin*, 10 CSR 10-6.170
- *Start-up, Shutdown and Malfunction Conditions,* 10 CSR 10-6.050
- *Restriction of Emission of Visible Air Contaminants*, 10 CSR 10-6.220
- *Restriction of Emission of Odors*, 10 CSR 10-6.165

SPECIFIC REQUIREMENTS

- 40 CFR 63 Subpart HHHHHH (MACT 6H) – National Emission Standards for Hazardous Air Pollutants: Paint Stripping and Miscellaneous Surface Coating Operations at Area Sources

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*, it is recommended that this permit be granted with special conditions.

PERMIT DOCUMENTS

The following documents are incorporated by reference into this permit:

- The Application for Authority to Construct form, dated May 26, 2016, received May 27, 2016, designating Classic Buildings LLC as the owner and operator of the installation.

Attachment A – Ethylene Glycol HAP Compliance Worksheet

Classic Buildings LLC
Osage County, S21, T43N, R8W
Project Number: 2016-05-077
Installation ID Number: 151-0060
Permit Number: 092017-012

This sheet covers the month of _____ in the year _____.

Column 1	Column 2	Column 3 (a)	Column 4	Column 5 (b)	Column 6
Material Used (Name)	Emission Unit Description/ID	Amount of Material Used (Include Units)	Density (Pounds per Gallon)	HAP Content (Weight %)	HAP Emissions (Tons)
Example: 888-300 Bard Red	EP-01	522 gallons	9.7	5	0.13
(c) Total Ethylene Glycol Emissions Calculated for this Month in Tons:					
(d) Last Month's 12-Month Ethylene Glycol Emissions Total, in Tons:					
(e) Previous Year's Monthly Ethylene Glycol Emissions Total, in Tons:					
(f) Current 12-month Total of Ethylene Glycol Emissions in Tons: [(c) + (d) - (e)]					

Instructions: This worksheet must include Ethylene Glycol emissions from all emission units installed or permitted at the time of permit issuance.

(a) 1) If usage is in tons - [Column 3] x [Column 5] = [Column 6];
2) If usage is in pounds - [Column 3] x [Column 5] x [0.0005] = [Column 6];
3) If usage is in gallons - [Column 3] x [Column 4] x [Column 5 ÷ 100] x [0.0005] = [Column 6];

(b) Ethylene Glycol content should be obtained from the Safety Data Sheet (SDS) and should represent the total mass of the Ethylene Glycol compound by weight. If the content is given as a range, then the maximum value should be used.

(c) Summation of [Column 6] in Tons;

(d) 12-Month Ethylene Glycol emissions (g) from last month's Attachment A in Tons;

(e) Monthly Ethylene Glycol emissions total (d) from the previous year's Attachment A in Tons; and

(f) Calculate the new 12-month Ethylene Glycol emissions total. **A 12-Month Individual HAP emissions total (g) of less than 10.0 tons for each Ethylene Glycol indicates compliance.**

Attachment B –Paint Booth System Alternative Coating Potential to Emit Compliance Worksheet

Classic Buildings LLC
Osage County S21, T43N, R8W
Project Number: 2016-05-077
Installation ID Number: 151-0060
Permit Number: 092017 - 012

Coating name: _____ Date: _____ (copy this sheet as needed)

A	B	C	D	E	F	G	H	I	J
Individual HAP Name and CAS No.	HAP is also PM (yes / no)	Individual HAP Content (max weight %)	Maximum Application Rate (lb coating per hour)	Overall PM Control Efficiency (%)	Individual HAP PTE (lb/hr)	Individual HAP PTE (tons per year)	Individual HAP SMAL (tons per year)	Coating VOC (weight %)	Coating VOC PTE (tons per year)
Benzene 71-43-2	*no*	*2.0%*	*58.20*	*N/A*	*1.16*	*5.10*	*2.0*	*36.61%*	*93.32*
Cobalt 2-Ethylhexanoate 136-52-7	*yes*	*0.5%*		*99.0%*	*0.0029*	*0.0127*	*0.1*		

A. Record the all individual HAPs from this single coating SDS.
B. Compare the HAP to Appendix A for verification as particulate matter.
C. Record the maximum weight percent of each HAP from the MSDS.
D. Record the maximum application rate with units of lbs of coating per hour.
E. The overall PM control efficiency includes the air atomized spray gun transfer efficiency (50%), booth capture efficiency (100%), and exhaust filter control efficiency (98%): 50% + ((1 - 50%) x 100% x 98%) = 99.0%
F. Calculate the particulate matter HAP potential to emit: F = C x D x (1 - E). Otherwise, calculate the volatile HAP potential to emit: F = C x D.
G. Calculate the Individual HAP PTE (tons per year): G = F x (8,760 / 2,000).
H. Record the individual HAP SMAL from Appendix A or the most recent HAP SMAL Table, located at http://dnr.mo.gov/env/apcp/docs/cp-hapsmaltbl6.pdf Seek approval from the Air Pollution Control Program New Source Review Unit before using this coating if the individual HAP potential to emit is greater than the SMAL.
I. Record or calculate the coating's VOC weight % from the MSDS. Verify VOC status according to 10 CSR 10-6.020 *Definitions and Common Reference Tables* (2)(V)13.

Calculate the VOC potential to emit: J = D x I x (8,760 / 2,000). Seek approval from the Air Pollution Control Program New Source Review Unit before using this coating if the VOC potential to emit is greater than 32.90 tons per year.

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

Chemical	CAS #	SMAL (lbs/yr)	Group ID	VOC	PM
ACETALDEHYDE	75-07-0	9		Y	N
ACETAMIDE	60-35-5	1		Y	N
ACETONITRILE	75-05-8	4		Y	N
ACETOPHENONE	98-86-2	1		Y	N
ACETYLAMINOFLUORINE, [2-]	53-96-3	0.005	V	Y	Y
ACROLEIN	107-02-8	0.04		Y	N
ACRYLAMIDE	79-06-1	0.02		Y	N
ACRYLIC ACID	79-10-7	0.6		Y	N
ACRYLONITRILE	107-13-1	0.3		Y	N
ALLYL CHLORIDE	107-05-1	1		Y	N
AMINOBIPHENYL, [4-]	92-67-1	1	V	Y	N
ANILINE	62-53-3	1		Y	N
ANISIDINE, [ORTHO-]	90-04-0	1		Y	N
ANTHRACENE	120-12-7	0.01	V	Y	N
ANTIMONY COMPOUNDS		5	H	N	Y
ANTIMONY PENTAFLUORIDE	7783-70-2	0.1	H	N	Y
ANTIMONY POTASSIUM TARTRATE	28300-74-5	1	H	N	Y
ANTIMONY TRIOXIDE	1309-64-4	1	H	N	Y
ANTIMONY TRISULFIDE	1345-04-6	0.1	H	N	Y
ARSENIC COMPOUNDS		0.005	I	N	Y
ASBESTOS	1332-21-4	0	A	N	Y
BENZ(A)ANTHRACENE	56-55-3	0.01	V	Y	N
BENZENE	71-43-2	2		Y	N
BENZIDINE	92-87-5	0.0003	V	Y	N
BENZO(A)PYRENE	50-32-8	0.01	V	Y	N
BENZO(B)FLUORANTHENE	205-99-2	0.01	V	Y	N
BENZO(K)FLUORANTHENE	207-08-9	0.01	V	Y	N
BENZOTRICHLORIDE	98-07-7	0.006		Y	N
BENZYL CHLORIDE	100-44-7	0.1		Y	N
BERYLLIUM COMPOUNDS		0.008	J	N	Y
BERYLLIUM SALTS		2E-05	J	N	Y
BIPHENYL, [1,1-]	92-52-4	10	V	Y	N
BIS(CHLOROETHYL)ETHER	111-44-4	0.06		Y	N
BIS(CHLOROMETHYL)ETHER	542-88-1	0.0003		Y	N
BROMOFORM	75-25-2	10		Y	N
BROMOMETHANE	74-83-9	10		Y	N
BUTADIENE, [1,3-]	106-99-0	0.07		Y	N
BUTOXYETHANOL ACETATE, [2-]	112-07-2	5	P	Y	N
BUTYLENE OXIDE, [1,2-]	106-88-7	1		Y	N
CADMIUM COMPOUNDS		0.01	K	N	Y
CALCIUM CYANAMIDE	156-62-7	10		Y	Y
CAPROLACTAM (Delisted)	105-60-2				
CAPTAN	133-06-2	10		Y	Y
CARBARYL	63-25-2	10	V	Y	Y
CARBON DISULFIDE	75-15-0	1		Y	N
CARBON TETRACHLORIDE	56-23-5	1		Y	N
CARBONYL SULFIDE	463-58-1	5		Y	N
CATECHOL	120-80-9	5		Y	N
CHLORAMBEN	133-90-4	1		Y	Y
CHLORDANE	57-74-9	0.01		Y	Y
CHLORINE	7782-50-5	0.1		N	N
CHLOROACETIC ACID	79-11-8	0.1		Y	N
CHLOROACETOPHENONE, [2-]	532-27-4	0.06		Y	N
CHLOROBENZENE	108-90-7	10		Y	N
CHLOROBENZILATE	510-15-6	0.4	V	Y	Y
CHLOROFORM	67-66-3	0.9		Y	N
CHLOROMETHYL METHYL ETHER	107-30-2	0.1		Y	N
CHLOROPRENE	126-99-8	1		Y	N
CHROMIUM (VI) COMPOUNDS		0.002	L	N	Y
CHROMIUM COMPOUNDS		5	L	N	Y
CHRYSENE	218-01-9	0.01	V	Y	N
COBALT COMPOUNDS		0.1	M	N	Y
COKE OVEN EMMISIONS	8007-45-2	0.03	N	Y	N
CRESOL, [META-]	108-39-4	1	B	Y	N
CRESOL, [ORTHO-]	95-48-7	1	B	Y	N
CRESOL, [PARA-]	106-44-5	1	B	Y	N
CRESOLS (MIXED ISOMERS)	1319-77-3	1	B	Y	N
CUMENE	98-82-8	10		Y	N
CYANIDE COMPOUNDS		0.1	O	Y	N
DDE	72-55-9	0.01	V	Y	Y
DI(2-ETHYLHEXYL) PHTHALATE, (DEHP)	117-81-7	5		Y	N
DIAMINOTOLUENE, [2,4-]	95-80-7	0.02		Y	N
DIAZOMETHANE	334-88-3	1		Y	N
DIBENZ(A,H)ANTHRACENE	53-70-3	0.01	V	Y	N
DIOXINS/FURANS		6E-07	D,V	Y	N
DIBENZOFURAN	132-64-9	5	V	Y	N
DIBROMO-3-CHLOROPROPANE, [1,2-]	96-12-8	0.01		Y	N
DIBROMOETHANE, [1,2-]	106-93-4	0.1		Y	N
DIBUTYL PHTHALATE	84-74-2	10		Y	Y
DICHLOROBENZENE, [1,4-]	106-46-7	3		Y	N
DICHLOROBENZIDENE, [3,3-]	91-94-1	0.2	V	Y	Y
DICHLOROETHANE, [1,1-]	75-34-3	1		Y	N
DICHLOROETHANE, [1,2-]	107-06-2	0.8		Y	N
DICHLOROETHYLENE, [1,1-]	75-35-4	0.4		Y	N
DICHLOROMETHANE	75-09-2	10		N	N
DICHLOROPHENOXYACETIC ACID, [2,4-]	94-75-7	10	C	Y	Y
DICHLOROPROPANE, [1,2-]	78-87-5	1		Y	N
DICHLOROPROPENE, [1,3-]	542-75-6	1		Y	N
DICHLORVOS	62-73-7	0.2		Y	N
DIETHANOLAMINE	111-42-2	5		Y	N
DIETHYL SULFATE	64-67-5	1		Y	N
DIETHYLENE GLYCOL MONOBUTYL ETHER	112-34-5	5	P	Y	N
DIMETHOXYBENZIDINE, [3,3-]	119-90-4	0.1	V	Y	Y
DIMETHYL BENZIDINE, [3,3-]	119-93-7	0.008	V	Y	Y
DIMETHYL CARBAMOYL CHLORIDE	79-44-7	0.02		Y	N
DIMETHYL FORMAMIDE	68-12-2	1		Y	N
DIMETHYL HYDRAZINE, [1,1-]	57-14-7	0.008		Y	N
DIMETHYL PHTHALATE	131-11-3	10		Y	N
DIMETHYL SULFATE	77-78-1	0.1		Y	N
DIMETHYLAMINOAZOBENZENE, [4-]	60-11-7	1		Y	N
DIMETHYLANILINE, [N,N-]	121-69-7	1		Y	N
DINITRO-O-CRESOL, [4,6-] (Note 6)	534-52-1	0.1	E	Y	Y
DINITROPHENOL, [2,4-]	51-28-5	1		Y	N
DINITROTOLUENE, [2,4-]	121-14-2	0.02		Y	N
DIOXANE, [1,4-]	123-91-1	6		Y	N
DIPHENYLHYDRAZINE, [1,2-]	122-66-7	0.09	V	Y	Y
DIPHENYLMETHANE DIISOCYANATE, [4,4-]	101-68-8	0.1	V	Y	N
EPICHLOROHYDRIN	106-89-8	2		Y	N
ETHOXYETHANOL, [2-]	110-80-5	10	P	Y	N
ETHOXYETHYL ACETATE, [2-]	111-15-9	5	P	Y	N
ETHYL ACRYLATE	140-88-5	1		Y	N
ETHYL BENZENE	100-41-4	10		Y	N
ETHYL CHLORIDE	75-00-3	10		Y	N
ETHYLENE GLYCOL	107-21-1	10		Y	N
ETHYLENE GLYCOL MONOBUTYL ETHER (Delisted)	111-76-2				
ETHYLENE GLYCOL MONOHEXYL ETHER	112-25-4	5	P	Y	N
ETHYLENE IMINE [AZRIDINE]	151-56-4	0.003		Y	N
ETHYLENE OXIDE	75-21-8	0.1		Y	N
ETHYLENE THIOUREA	96-45-7	0.6		Y	Y
FORMALDEHYDE	50-00-0	2		Y	N
GLYCOL ETHER (ETHYLENE GLYCOL ETHERS)		5	P	Y	N
GLYCOL ETHER (DIETHYLENE GLYCOL ETHERS)		5	P	Y	N
HEPTACHLOR	76-44-8	0.02		Y	N
HEXACHLOROBENZENE	118-74-1	0.01		Y	N
HEXACHLOROBUTADIENE	87-68-3	0.9		Y	N
HEXACHLOROCYCLOHEXANE, [ALPHA-]	319-84-6	0.01	F	Y	N
HEXACHLOROCYCLOHEXANE, [BETA-]	319-85-7	0.01	F	Y	N
HEXACHLOROCYCLOHEXANE, [DELTA-]	319-86-8	0.01	F	Y	N
HEXACHLOROCYCLOHEXANE, [TECHNICAL]	608-73-1	0.01	F	Y	N

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

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

Legend

Group ID	Aggregate Group Name
A	Asbestos
B	Cresols/Cresylic Acid (isomers and mixtures)
C	2,4 - D, Salts and Esters
D	Dibenzofurans, Dibenzodioxins
E	4, 6 Dinitro-o-cresol, and Salts
F	Lindane (all isomers)
G	Xylenes (all isomers and mixtures)
H	Antimony Compounds
I	Arsenic Compounds
J	Beryllium Compounds
K	Cadmium Compounds
L	Chromium Compounds
M	Cobalt Compounds
N	Coke Oven Emissions
O	Cyanide Compounds
P	Glycol Ethers
Q	Lead Compounds (except elemental Lead)
R	Manganese Compounds
S	Mercury Compounds
T	Fine Mineral Fibers
U	Nickel Compounds
V	Polycyclic Organic Matter
W	Selenium Compounds
X	Polychlorinated Biphenyls (Aroclors)
Y	Radionuclides

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

APPENDIX B

Abbreviations and Acronyms

% ..... percent
°F ..... degrees Fahrenheit
acfm ..... actual cubic feet per minute
BACT..... Best Available Control Technology
BMPs..... Best Management Practices
Btu..... British thermal unit
CAM ..... Compliance Assurance Monitoring
CAS ..... Chemical Abstracts Service
CEMS ..... Continuous Emission Monitor System
CFR ..... Code of Federal Regulations
CO ..... carbon monoxide
CO_2..... carbon dioxide
CO_2e..... carbon dioxide equivalent
COMS..... Continuous Opacity Monitoring System
CSR..... Code of State Regulations
dscf..... dry standard cubic feet
EIQ ..... Emission Inventory Questionnaire
EP..... Emission Point
EPA ..... Environmental Protection Agency
EU..... Emission Unit
fps ..... feet per second
ft..... feet
GACT ..... Generally Available Control Technology
GHG ..... Greenhouse Gas
gpm ..... gallons per minute
gr..... grains
GWP..... Global Warming Potential
HAP ..... Hazardous Air Pollutant
hr..... hour
hp ..... horsepower
lb ..... pound
lbs/hr..... pounds per hour
MACT ..... Maximum Achievable Control Technology
$\mu g/m^3$..... micrograms per cubic meter
m/s ..... meters per second
Mgal ..... 1,000 gallons
MW..... megawatt
MHDR..... maximum hourly design rate
MMBtu ... Million British thermal units
MMCF..... million cubic feet
MSDS..... Material Safety Data Sheet
NAAQS .. National Ambient Air Quality Standards
NESHAPs National Emissions Standards for Hazardous Air Pollutants
NO_x..... nitrogen oxides
NSPS..... New Source Performance Standards
NSR..... New Source Review
PM..... particulate matter
$PM_{2.5}$..... particulate matter less than 2.5 microns in aerodynamic diameter
PM_{10} ..... particulate matter less than 10 microns in aerodynamic diameter
ppm..... parts per million
PSD..... Prevention of Significant Deterioration
PTE ..... potential to emit
RACT ..... Reasonable Available Control Technology
RAL..... Risk Assessment Level
SCC..... Source Classification Code
scfm..... standard cubic feet per minute
SDS..... Safety Data Sheet
SIC ..... Standard Industrial Classification
SIP..... State Implementation Plan
SMAL ..... Screening Model Action Levels
SO_x..... sulfur oxides
SO_2..... sulfur dioxide
tph..... tons per hour
tpy..... tons per year
VMT..... vehicle miles traveled
VOC..... Volatile Organic Compound

Missouri Department of dnr.mo.gov
NATURAL RESOURCES
Eric R. Greitens, Governor Carol S. Comer, Director

SEP 2 7 2017

Mr. Mark Schwartzhoff
Controller
Classic Buildings LLC
67 Progress Lane
Linn, MO 65051

RE: New Source Review Permit - Project Number: 2016-05-077

Dear Mr. Schwartzhoff:

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 condition and your new source review permit application 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.

This permit may include requirements with which you may not be familiar. If you would like the department to meet with you to discuss how to understand and satisfy the requirements contained in this permit, an appointment referred to as a Compliance Assistance Visit (CAV) can be set up with you. To request a CAV, please contact your local regional office or fill out an online request. The regional office contact information can be found at the following website: http://dnr.mo.gov/regions/. The online CAV request can be found at http://dnr.mo.gov/cav/compliance.htm.

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.

If you have any questions regarding this permit, please do not hesitate to contact Chad Stephenson, at the Department of Natural Resources' 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

Susan Heckenkamp
New Source Review Unit Chief

SH:csj

Enclosures

c: Northeast Regional Office
PAMS File: 2016-05-077

Permit Number: 092017-012