



Missouri Department of dnr.mo.gov

NATURAL RESOURCES

Michael L. Parson, Governor

Carol S. Comer, Director

December 1, 2020

Noah Miller
EHS Manager
Architectural Components Group, Inc.
900 George Street
Marshfield, MO 65706

RE: New Source Review Permit Amendment - Permit Number: 082020-009A
Project Number: 2020-10-021; Installation Number: 225-0039

Dear Noah Miller:

On September 22, 2020, the Missouri Air Pollution Control Program received your request to relocate Gang Rip Saw (EP-09b) and change its corresponding control device at your existing installation in Webster County (S9, T30N, R18W). Attached with this letter is your amendment. The attached special conditions, revised page 14, and revised Attachment E replace all special conditions, Page 14, and Attachment E in Permit No. 082020-009.

Architectural Components Group, Inc. (ACGI) submitted the equipment request for the following reasons:

1. To correctly identify the emission unit numbers for the Gang Rip Saw and Unisand 200. The Gang Rip Saw emission unit number is EP-09b. The Unisand 200 emission unit number is EP-09c. These were incorrectly switched in Special Condition 5, Page 14, and Attachment E in Permit No. 082020-009.
2. The Gang Rip Saw (EP-09b) is being disconnected from the Millwork Dantherm dust collector and being given its own Grizzly dust collector (CD-09b). This changes Table 5 in Special Condition 10.
3. The Millwork Saws 1 and 2 (EP-16a and EP-16b) were incorrectly reported in Table 5 of Special Condition 10 to share a dust collector when each really has their own Grizzly dust collector (CD-16a and CD-16b).
4. The Assembly Saws 1 and 2 (EP-17a and EP-17b) were incorrectly reported in Table 5 of Special Condition 10 to share a dust collector when each really has their own Grizzly dust collector (CD-17a and CD-17b).

None of these changes affect the potential to emit (PTE) for any of these emission units. The new Grizzly dust collector (CD-09b) for the Gang Rip Saw is actually the dust collector currently controlling Source Moulder 2 (EP-11). ACGI ensures that the dust collector has the same control efficiency as the Millwork Dantherm dust collector (CD-09) that the Gang Rip Saw is currently connected to. Source Moulder 2 (EP-11) will receive a new Grizzly dust collector but it will keep the same control device number and efficiency. Therefore, it doesn't change anything in Permit No. 082020-009 with regards to the Source Moulder 2. The change in dust collectors is being made because the Gang Rip Saw is being relocated to a



Noah Miller
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different area at the facility. For clarity, all special conditions from Permit 082020-009 have been superseded and restated in this amendment.

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.ao.mo.gov/ahc.

If you have any questions regarding this amendment, please do not hesitate to contact Jonathan Halla 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:hja

Enclosures

c: Southwest Regional Office
PAMS File: 2020-10-021

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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 (3)(E). "Conditions required by permitting authority."

Architectural Components Group, Inc.
Webster County, S9, T30N, R18W

1. Superseding Condition
 - A. The conditions of this permit supersede Special Condition 1 found in the previously issued construction permit 102019-009 and all special conditions found in the previously issued construction permit 082020-009 issued by the Air Pollution Control Program.
 - B. Downdraft Booth (EP-19) is now included in the limits established in Special Conditions 3, 4, and 5 for the equipment installed in 2019.

2. VOC Emission Limitations – 2015 Project
 - A. Architectural Components Group, Inc. shall emit less than 40.0 tons of VOCs in any consecutive 12-month period from the emission points installed in 2015 that are listed below.
 - 1) UV Line (EP-05)
 - 2) Stain Machine (EP-06)
 - 3) Solvent Cleaner (EP-21)
 - 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 Conditions 2.A.

3. VOC Emission Limitations – 2019 Project
 - A. Architectural Components Group, Inc. shall emit less than 40.0 tons of VOCs in any consecutive 12-month period from the emission points listed below.
 - 1) Double Door Spray Booth (EP-01)
 - 2) Spray Booth 1 (EP-02)
 - 3) Spray Booth 2 (EP-03)
 - 4) Spray Booth 3 (EP-04)
 - 5) Downdraft Booth (EP-19)
 - 6) 521 Stain Machine (EP-20)

SPECIAL CONDITIONS:

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

- B. Attachment B 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.

- 4. HAPs Emission Limitations
 - A. Architectural Components Group, Inc. shall emit less than the respective SMAL value for each individual HAP and 25.0 tons combined of HAPs in any consecutive 12-month period from the installation. The equipment at the installation that emit HAPs are listed below.
 - 1) Double Door Spray Booth (EP-01)
 - 2) Spray Booth 1 (EP-02)
 - 3) Spray Booth 2 (EP-03)
 - 4) Spray Booth 3 (EP-04)
 - 5) Stain Machine (EP-06)
 - 6) Downdraft Booth (EP-19)
 - 7) 521 Stain Machine (EP-20)
 - 8) Solvent Cleaner (EP-21)

 - B. Attachment C and Attachment D or equivalent forms, such as electronic forms, approved by the Air Pollution Control Program shall be used to demonstrate compliance with Special Conditions 4.A.

- 5. PM_{2.5} Emission Limitations – 2019 Project
 - A. Architectural Components Group, Inc. shall emit less than 10.0 tons of PM_{2.5} in any consecutive 12-month period from the emission points listed below in Table 1. The SSM emissions as reported to the Air Pollution Control Program’s Compliance/Enforcement Section in accordance with the requirements of 10 CSR 10-6.050 *Start-Up, Shutdown, and Malfunction Conditions* shall be included in the limit.

Table 1: PM_{2.5} Emission Units

Emission Unit Number	Description
EP-01	Double Door Spray Booth
EP-02	Spray Booth 1
EP-03	Spray Booth 2
EP-04	Spray Booth 3
EP-07a	Biesse
EP-07e	CNC Twin Bed Router
EP-07i	Superfici DMC Sander
EP-07j	Superfici Vacuum Coater (Sanding)
EP-08	Planer

SPECIAL CONDITIONS:

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

Emission Unit Number	Description
EP-09a	Optisander
EP-09b	Gang Rip Saw
EP-09c	Unisand 200 DMC Sander
EP-10	Moulder 1
EP-11	Moulder 2
EP-12	Holzma Beam Saw
EP-13	PanelPro CNC Single Bed Router
EP-14	Akron Edge Bander
EP-16a	Millwork Saw #1
EP-16b	Millwork Saw #2
EP-17a	Assembly Saw #1
EP-17b	Assembly Saw #2
EP-19	Downdraft Booth
EP-20	521 Stain Machine

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

6. Control Device Requirement – Filters

- A. Architectural Components Group, Inc. shall control particulate emissions from the equipment listed in Table 2 using a high-efficiency filter capable of a minimum 99% control efficiency.

Table 2: Equipment Controlled by Filters

Emission Unit Number	Description
EP-01	Double Door Spray Booth
EP-02	Spray Booth 1
EP-03	Spray Booth 2
EP-04	Spray Booth 3
EP-05	Superfici UV line
EP-06	Superfici Stain Machine
EP-20	521 Stain Machine

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SPECIAL CONDITIONS:

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

- B. Architectural Components Group, Inc. shall maintain a copy on site of the filter manufacturer's specifications, or equivalent, showing 99% control efficiency.
 - 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). Architectural Components Group, Inc. shall regenerate/replace the filters before breakthrough.
 - D. The filters shall be operated, maintained and replaced in accordance with the manufacturer's specifications.
 - E. Architectural Components Group, Inc. shall maintain a copy of the filter manufacturer's performance warranty, or equivalent, on site.
 - F. All stain machine and UV line filters (EP-05, EP-06, and EP-20) shall be inspected every day of operation. The status of each filter shall be recorded and the filter shall be replaced when visibly full.
 - G. All spray booth filters (EP-01, 02, 03, and 04) shall be inspected weekly. The status of each filter shall be recorded and the filter shall be replaced when visibly full.
7. Capture Device Requirement – Spray Booths (EP-01, 02, 03, 04)
- A. Architectural Components Group, Inc. shall use the paint booth to capture emissions from the spray coating activities.
 - B. Architectural Components Group, Inc. shall design and construct the paint booth according to the Occupational Safety and Health Administration (OSHA) requirements, 29 CFR 1910.94(c)(6) *Velocity and air flow requirements*.
 - C. Architectural Components Group, Inc. shall demonstrate that the paint booths were constructed according to Special Condition 7.B. by keeping a record of the following design parameters:
 - a) the minimum recommended face velocity
 - b) engineering drawings which demonstrate that the spray booth was designed to meet the minimum face velocity
 - D. Architectural Components Group, Inc. shall verify the proper operation of the paint booth by recording the actual face velocity or the actual

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SPECIAL CONDITIONS:

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

volumetric airflow for each paint booth at least one time per calendar year (no less than nine calendar months and no more than 15 calendar months following the previous measurement).

- 8. Capture Device Requirement – Hoods/Vacuum Hoses
 - A. Architectural Components Group, Inc. shall use hoods to capture emissions from the emission units indicated in Table 3. A hood is a shaped inlet to a pollution control system that does not totally surround emissions from an emission unit.

Table 3: Equipment Controlled by Hoods/Vacuum Hoses

Controlled Emission Unit Number	Description
EP-06	Superfici Stain Machine
EP-07a	Biesse
EP-07c	Gabbiani Beam Saw
EP-07d	Micro-Perf
EP-07e	CNC Twin Bed Router
EP-07f	Routech #1
EP-07g	Routech #2
EP-07h	Stefani Edge Bander
EP-07j	Superfici Vacuum Coater
EP-08	Planer
EP-09a	OptiSander
EP-09b	Gang Rip Saw
EP-12	Holzma Beam Saw
EP-13	PanelPro CNC Single Bed Router
EP-14	Akron Edge Bander
EP-15	Cefla Vacuum Coater
EP-16a	Millwork Saw 1
EP-16b	Millwork Saw 2
EP-17a	Assembly Saw 1
EP-17b	Assembly Saw 2
EP-20	521 Stain Machine

- B. The maximum distance between the hood inlet and the emissions source shall not exceed 1.5 times the diameter of the exhaust duct.
- C. Architectural Components Group, Inc. shall minimize cross drafts by locating the emissions source and the hood inside a building with 4 sides and a roof.

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SPECIAL CONDITIONS:

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

9. Capture Device Requirement – Total Enclosure
 - A. Architectural Components Group, Inc. shall use total enclosures to capture emissions from the emission units indicated in Table 4.

Table 4: Equipment Controlled by Total Enclosures

Controlled Emission Unit Number	Description
EP-07b	DMC 3 Belt Sander
EP-07i	Superfici DMC Sander
EP-09c	Unisand 200
EP-10	Moulder 1
EP-11	Moulder 2

- B. A total enclosure is an enclosure that, with the exception of openings for material entry and exit, completely surrounds the emissions from an emission unit.
10. Control Device Requirement – Baghouses/Dust Collectors

Architectural Components Group, Inc. shall control emissions from the list of equipment, in Table 5, using baghouses or dust collectors as specified in the permit application.

SPECIAL CONDITIONS:

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

Table 5: List of Baghouses and Emission Units Controlled

Baghouse/Dust Collector	Controlled Emission Unit Number	Description
Planer Grizzly (CD-08)	EP-08	Planer
Moulder 1 Grizzly (CD-10)	EP-10	Moulder 1
Moulder 2 Grizzly (CD-11)	EP-11	Moulder 2
Millwork Saws Grizzlies (CD-16a and CD-16b)	EP-16a	Millwork Saw 1
	EP-16b	Millwork Saw 2
Assembly Grizzlies (CD-17a and CD-17b)	EP-17a	Assembly Saw 1
	EP-17b	Assembly Saw 2
Holzma Dantherm (CD-12)	EP-12	Holzma Beam Saw
PanelPro Dantherm (CD-13)	EP-13	PanelPro CNC Single Bed Router
Stain Machine Grizzly (CD-06)	EP-06	Superfici Stain Machine
Celfa Grizzly (CD-15)	EP-15	Celfa Vacuum Coater
Sampler Dantherm (CD-14)	EP-14	Akron Edge Bander
Main Nederman (CD-07)	EP-07a	Biesse
	EP-07b	DMC 3 Belt Sander
	EP-07c	Gabbiani Beam Saw
	EP-07d	Micro-Perf
	EP-07e	CNC Twin Bed Router
	EP-07f	Routech #1
	EP-07g	Routech #2
	EP-07h	Stefani Edge Bander
	EP-07i	Superfici DMC Sander
	EP-07j	Superfici Vacuum Coater
Millwork Dantherm (CD-09)	EP-09a	OptiSander
	EP-09c	Unisand 200
Gang Rip Saw Grizzly (CD-09b)	EP-09b	Gang Rip Saw

- A. The baghouses or dust collectors shall be operated and maintained in accordance with the manufacturer's specifications.
- B. Replacement filters for the baghouses or dust collectors shall be kept on hand at all times. The bags shall be made of fibers appropriate for operating conditions expected to occur (i.e. temperature limits, acidic and alkali resistance, and abrasion resistance).

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SPECIAL CONDITIONS:

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

- C. The control devices listed in Table 5 shall emit zero visible emissions (not 0% opacity). Architectural Components Group, Inc. shall demonstrate compliance by monitoring and recording visible emissions from each control device at least once weekly while the emission units being controlled are operating. During proper operation, no visible emissions are expected from the control devices. The duration of the observation shall be for a two minute time period. ACGI shall document the date of each observation and indicate whether or not there were visible emissions. In the event that there are visible emissions, corrective actions shall be implemented within a reasonable period.
 - D. The filters for the Grizzly dust collectors, listed in Table 5, shall be inspected once every week. The status of each filter shall be recorded and the filter shall be replaced when visibly full.
 - E. Architectural Components Group, Inc. shall maintain a copy of the baghouse or dust collector manufacturer's performance warranty or equivalent on site.
 - F. Architectural Components Group, Inc. shall maintain an operating and maintenance log for the baghouses or dust collectors 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.
11. Operational Requirement - Solvent Cloths
Architectural Components Group, Inc. shall keep the solvents and cleaning solutions in sealed containers whenever the materials are not in use. Architectural Components Group, Inc. shall provide and maintain suitable, easily read, permanent markings on all solvents and cleaning solution containers used with this equipment.
12. Alternative Materials
- A. Architectural Components Group, Inc. is allowed to use alternative materials in EP-01, EP-02, EP-03, EP-04, EP-05, EP-06, EP-07j, EP-15, EP-20, and EP-21 that are different from the materials listed in the Application to Construct.

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SPECIAL CONDITIONS:

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

- B. The limits established by Special Condition 2, 3, 4, and 5 shall include the use of any alternative materials. Their emissions shall be accounted for in the recordkeeping associated with this limit.
 - C. Architectural Components Group, Inc. shall maintain a copy of the alternative material's information and other documentation (such as SDS) used to estimate the emissions. Architectural Components Group, Inc. shall use the highest VOC and HAP concentrations listed on the material's SDS to calculate and track emissions from the alternative materials.
13. Record Keeping and Reporting Requirements
- A. Architectural Components Group, 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 SDS for all materials used.
 - B. Architectural Components Group, Inc. shall report to the Air Pollution Control Program's Compliance/Enforcement Section, by mail at P.O. Box 176, Jefferson City, MO 65102 or by e-mail at AirComplainceReporting@dnr.mo.gov, 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.

Unit Number	Name/Description	MHDR	Year Installed
EP-09a	Optisander	0.95 tons/hr	2019
EP-09b	Gang Rip Saw	21.25 tons/hr	2019
EP-09c	Unisand 200 DMC Sander	7.77 tons/hr	2019
EP-10	Moulder 1	1.43 tons/hr	2019
EP-11	Moulder 2	1.43 tons/hr	2019
EP-12	Holzma Beam Saw	0.51 tons/hr	2019
EP-13	PanelPro CNC Single Bed Router	0.47 tons/hr	2019
EP-14	Akron Edge Bander	0.017 tons/hr	2019
EP-15	Cefla Vacuum Coater (Spraying)	0.348 gal/hr	2015
	Cefla Vacuum Coater (Sanding)	1.43 tons/hr	
EP-16a	Millwork Saw #1	0.19 tons/hr	2019
EP-16b	Millwork Saw #2	0.19 tons/hr	2019
EP-17a	Assembly Saw #1	0.004 tons/hr	2019
EP-17b	Assembly Saw #2	0.004 tons/hr	2019
EP-19 ^a	Downdraft Booth	0.691 gal/hr	2019
EP-20	521 Stain Machine	0.84 gal/hr	2019
EP-21	Solvent Cleaners	N/A	2015
EP-22	Haul Road (Unpaved)	0.827 VMT/hr	2015
EP-23	Haul Road (Paved)	0.216 VMT/hr	2015

^a Originally permitted under Project No. 2019-07-043 , however, all 2019 equipment are considered one project and share a 40 tpy VOC limit.

EMISSIONS/CONTROLS EVALUATION

Potential emissions for the double door booth (EP-01), spray booths (EP-02, 03, 04), the UV line (EP-5), the stain lines (EP-6 and EP-20), and vacuum coaters (EP-7j and EP-15) were estimated using a mass balance approach and information obtained from the Safety Data Sheets (SDS). 100% of the VOC and volatile HAP content of the coatings are assumed to be emitted into the atmosphere.

The spray guns in the double door spray booth (EP-01) and spray booths (EP-02, 03, 04) are air assisted airless and the products being coated are typically flat surfaces. This led to using a transfer efficiency of 60% for PM, PM₁₀, and PM_{2.5}. The control efficiency of 99.9% was given by the blanket filter manufacturing specifications for PM, PM₁₀, and PM_{2.5}. However, a control efficiency of 99%, for PM, PM₁₀ and PM_{2.5}, was used for more conservative calculations. The spray booths (EP-01, 02, 03, 04) all have four walls with one wall that has a door. The doors may be open during spraying so the booths are considered three sided. The capture rate of 90% was given for the booths.

The solid content of the materials that were not specifically stated in the SDSs, were estimated by subtracting the volatile content from the density of the material. The remainder was assumed to be PM. 96% of PM is assumed to be PM₁₀ and 96.4% of

Attachment E – 2019 Equipment PM_{2.5} Monthly Tracking Sheet

Architectural Components Group, Inc.
 Webster County, S1 T30N R18W
 Project Number: 2020-10-021
 Installation ID Number: 225-0039
 Permit Number: 082020-009A
 Date (Month, Year): _____

(a)	(b)	(c)	(d)	(e)	(f)
Unit Number	Description	Controlled Emission Factor (lbs of PM _{2.5} /hr)	Monthly Operating Hours	Individual PM _{2.5} Monthly Emissions (lbs)	Individual PM _{2.5} Monthly Emissions (tons)
EP-01	Double Door Spray Booth	0.277			
EP-02	Spray Booth 1	0.295			
EP-03	Spray Booth 2	0.295			
EP-04	Spray Booth 3	0.295			
EP-07a	Biesse	0.013			
EP-07e	CNC Twin Bed Router	0.013			
EP-07i	Superfici DMC Sander	0.006			
EP-07j	Superfici Vacuum Coater (Sanding)	0.045			
EP-08	Planer	0.282			
EP-09a	Optisander	0.025			
EP-09b	Gang Rip Saw	0.564			
EP-09c	Unisand 200 DMC Sander	0.003			
EP-10	Moulder 1	0.001			
EP-11	Moulder 2	0.001			
EP-12	Holzma Beam Saw	0.014			
EP-13	PanelPro CNC Single Bed Router	0.013			
EP-14	Akron Edge Bander	0.001			
EP-16a	Millwork Saw #1	0.005			
EP-16b	Millwork Saw #2	0.005			
EP-17a	Assembly Saw #1	0.001			
EP-17b	Assembly Saw #2	0.001			
EP-19	Downdraft Booth	0.394			
EP-20	521 Stain Machine	0.007			
SSM Emissions					

(g)	Total PM _{2.5} Monthly Emissions, including SSM emissions (tons)	
(h)	Previous Month's 12-Month PM _{2.5} Emissions (tons)	
(i)	Monthly PM _{2.5} Emissions from Previous Year (tons)	
(j)	Current 12-Month PM _{2.5} Emissions (tons)	

- a) Record the emission unit number.
- b) Record the description for the emission unit.
- c) PM_{2.5} emission factor for each process/equipment.
- d) Record number of monthly operating hours for each piece of equipment.
- e) (e) = (c) x (d). Do this calculation for each piece of equipment.
- f) (f) = (e) / 2,000.
- g) Summation of column (f).
- h) Record the 12-month PM_{2.5} emissions (h) from last month.
- i) Record the monthly PM_{2.5} emissions (e) from this month last year.
- j) Calculate the new 12-month PM_{2.5} emissions. (j) = (g) + (h) – (i) A value less than **10.0 tons** of PM_{2.5} indicates compliance.
- k) An alternate form format may be used as long as the same information is presented.