REGION 5
CHICAGO, IL 60604

VIA ELECTRONIC MAIL
DELIVERY RECEIPT REQUESTED

Joandy Angrand, EHS Supervisor
American Woodmark Corporation
jangrand@woodmark.com

Re: Finding of Violation
American Woodmark Corporation
Gas City, Indiana

Dear Joandy Angrand:

The U.S. Environmental Protection Agency is issuing the enclosed Finding of Violation (FOV) to American Woodmark Corporation (you) under Section 113(a) of the Clean Air Act, 42 U.S.C. § 7413(a). We find that you are violating the National Emission Standards for Wood Furniture Manufacturing at 40 C.F.R. Part 63, Subpart JJ, and the facility's Title V Permit at your Gas City, Indiana facility.

Section 113 of the Clean Air Act gives us several enforcement options. These options include issuing an administrative compliance order, issuing an administrative penalty order and bringing a judicial civil or criminal action.

We are offering you an opportunity to confer with us about the violations alleged in the FOV. The conference will give you an opportunity to present information on the specific findings of violation, any efforts you have taken to comply and the steps you will take to prevent future violations. In addition, in order to make the conference more productive, we encourage you to submit to us information responsive to the FOV prior to the conference date.

Please plan for your facility's technical and management personnel to attend the conference to discuss compliance measures and commitments. You may have an attorney represent you at this conference. The EPA technical contact in this matter is Virginia Galinsky. You may call her at (312) 353-2089 or email her at Galinsky.virginia@epa.gov to request a conference. The EPA legal contact in this matter is Sarah Baehr, and she may be contacted at (312) 353-0396 or Baehr.sarah@epa.gov. You should make

the request within 10 calendar days following receipt of this letter. We should hold any conference within 30 calendar days following receipt of this letter.

Sincerely,

BRIAN DICKENS

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Date: 2024.06.26 [illegible] -05'00'

Brian Dickens
Supervisor,
Air Enforcement and Compliance Assurance Section
(MN/OH)

cc: Janusz Johnson, Chief
Air Compliance Branch, Office of Air Quality
Indiana Department of Environmental Management

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION 5

In the Matter of:	)	
	)	
American Woodmark Corporation	)	**FINDING OF VIOLATION**
Gas City, Indiana	)	
	)	**EPA-5-24-IN-11**
Proceedings Pursuant to	)	
the Clean Air Act,	)	
42 U.S.C. §§ 7401 et seq.	)	

FINDING OF VIOLATION

The U.S. Environmental Protection Agency finds that American Woodmark Corporation (AWC) is violating Section 112 of the Clean Air Act, 42 U.S.C. § 7412. Specifically, AWC is violating the National Emission Standards for Wood Furniture Manufacturing at 40 C.F.R. Part 63, Subpart JJ and its Title V Permit as follows:

Statutory Background

1. Section 112 of the Clean Air Act (CAA), 42 U.S.C. § 7412, requires EPA to promulgate a list of all categories and subcategories of new and existing "major sources" and "area sources" of hazardous air pollutants (HAPs) and establish emissions standards for the categories and subcategories. EPA codified these standards at 40 C.F.R. Parts 61 and 63.

2. A "Major Source" of HAP is defined as any stationary source or group of stationary sources located within a contiguous area and under common control that emits or has the potential to emit considering controls, in the aggregate, 10 tons per year or more of any HAP or 25 tons per year or more of any combination of HAP, unless the Administrator establishes a lesser quantity, or in the case of radionuclides, different criteria from those specified in this sentence. 42 U.S.C. § 7412(a)(1) and 40 C.F.R. § 63.2.

3. Pursuant to Section 502(b) of the CAA, 42 U.S.C. § 7661a(a), EPA promulgated regulations establishing the minimum elements of a Title V permit program to be administered by any air pollution control agency. See 57 Fed. Reg. 32,295 (July 21, 1992). Those regulations are codified at 40 C.F.R. Part 70.

Regulatory Authority

4. Pursuant to Section 112(d) of the CAA, 42 U.S.C. § 7412(d), on December 7, 1995, EPA promulgated the National Emission Standards for Wood Furniture Manufacturing Operations ("Subpart JJ"), codified at 40 C.F.R. §§ 63.800-819. See 60 Fed. Reg. 62930.

5. EPA has promulgated revisions to Subpart JJ on a number of occasions, including June 3, 1997 (62 Fed. Reg. 30259), December 28, 1998 (63 Fed. Reg. 71380), June 23, 2003 (68 Fed. Reg. 37353), and November 21, 2011 (76 Fed. Reg. 72071).

6. Subpart JJ defines wood furniture manufacturing operation as the finishing, gluing, cleaning, and washoff operations associated with the production of wood furniture or wood furniture components. 40 C.F.R. § 63.801.

7. Subpart JJ defines wood furniture as any product made of wood, a wood product such as rattan or wicker, or an engineered wood product such as particleboard that is manufactured at any facility that is engaged, either in part or in whole, in the manufacture of wood furniture or wood furniture components, including, but not limited to, facilities under any of the following standard industrial classification codes: 2434, 2511, 2512, 2517, 2519, 2521, 2531, 2541, 2599, or 5712. 40 C.F.R. § 63.801.

8. Subpart JJ defines wood furniture component as any part that is used in the manufacture of wood furniture. Examples include, but are not limited to, drawer sides, cabinet doors, seat cushions, and laminated tops. 40 C.F.R. § 63.801.

9. Subpart JJ applies to facilities engaged, either in part or in whole, in the manufacture of wood furniture or wood furniture components and that is located at a site that is a major source as defined in Subpart A of Part 63. *See* 40 C.F.R. § 63.800.

10. Subpart JJ, at 40 C.F.R. § 63.803(a), requires the owner and operator of an affected source to prepare and maintain a written work practice implementation plan that addresses each of the work practice standards presented in 40 C.F.R. § 63.803(b) – (l).

11. Subpart JJ, at 40 C.F.R. § 63.803(b), provides specific initial and annual training requirements for personnel involved in finishing, gluing, cleaning, and washoff operations, use of manufacturing equipment, or implementation of the Subpart JJ requirements. A copy of the training program is required to be maintained with the work practice implementation plan.

12. Subpart JJ, at 40 C.F.R. § 63.803(c), provides requirements for an inspection and maintenance plan, which must specify, among other things, an inspection schedule and methods for documenting the date and results of each inspection and any repairs that were made.

13. Subpart JJ, at 40 C.F.R. § 63.803(d), requires the development of an organic HAP solvent accounting form. The accounting form records: the quantity and type of organic HAP solvent used each month for washoff and cleaning; the number of pieces washed off, and the reason for the washoff; and the quantity of spent organic HAP solvent generated from each washoff and cleaning operation each month, and whether it is recycled onsite or offsite.

14. Subpart JJ, at 40 C.F.R. § 63.803(f), prohibits the owner or operator of an affected source from using compounds containing more than 8.0% by weight of VOC for cleaning spray booth components other than conveyors, continuous coaters and their enclosures, or metal filters, or plastic filters unless the spray booth is being refurbished.

15. Subpart JJ, at 40 C.F.R. § 63.803(g), provides that owners or operators of affected sources shall use normally closed containers for storing finishing, gluing, cleaning, and washoff materials.

16. Subpart JJ, at 40 C.F.R. § 63.806(e), requires onsite maintenance of the following records, among others: records demonstrating that the operator training program required by 63.803(b) is in place; records collected in accordance with the inspection and maintenance plan required by 63.803(c); and copies of documentation such as logs developed to demonstrate that the other provisions of the work practice implementation plan are followed.

Title V Permit

17. On October 8, 2019, the Indiana Department of Environmental Management (IDEM) issued Title V Permit No. 053-41820-00058 to AWC's facility in Gas City (the Title V Permit).

18. Condition D.1.2 of the Title V Permit limits the total VOC emissions from Finishing Lines 1, 2, and 3 to 249 tons per 12 consecutive month period, with compliance determined at the end of each month.

19. Condition D.1.8(b) of the Title V Permit provides that AWC shall calculate the VOC emissions from Finishing Line 1, 2, and 3 using the equation below in order to determine compliance with Condition D.1.2. The equation does not include any term which allows for a subtraction for recovered solvent. The Condition D.1.8(b) equation is as follows:

Total VOC emitted = [A x (1 – B)] + C + D

Where:

A = Total VOC input to Finishing Lines 1 and 2 when the thermal oxidizer CD-01 is used to control VOC emission from Finishing Lines 1 and 2, including coatings, dilution solvents, and cleaning solvents (tons/month);
B = The overall control efficiency of the thermal oxidizer CD-01 from the most recent valid compliance demonstration;
C = Total VOC input to Finishing Lines 1 and 2 when the thermal oxidizer CD-01 is not used to control VOC emission from Finishing Lines 1 and 2, including coatings, dilution solvents, and cleaning solvents (tons/month); and
D = Total VOC input to Finishing Line 3 including coatings, dilution solvents, and cleaning solvents (tons/month).

20. Condition D.1.14 of the Title V permit requires that:

a. "A continuous monitoring system shall be calibrated, maintained, and operated on the thermal oxidizer (CD-01) for measuring operating temperature. For the purpose of this condition, continuous means no less often than once per fifteen (15) minutes. The output of this system shall be recorded as 3-hour average…" …

c. On and after the date the stack test results are available, the Permittee shall operate the thermal oxidizer (CD-01) at or above the 3-hour average temperature as observed during the compliant stack test.
d. If the 3-hour average temperature falls below the above mentioned 3-hour average temperature, the Permittee shall take a reasonable response. Section C - Response to Excursions or Exceedances contains the Permittee's obligation with regard to the reasonable response steps required by this condition. A 3-hour average temperature reading below the above mentioned 3-hour average temperature is not a deviation from this permit. Failure to take response steps shall be considered a deviation from this permit.

21. Condition D.1.15 of the Title V Permit provides as follows:

a. The Permittee shall determine the appropriate duct pressure or fan amperage from the most recent valid stack test that demonstrates compliance with limits in Condition D.1.2.
b. The duct pressure or fan amperage shall be observed at least once per day when the thermal oxidizer (CD-01) is in operation. On and after the date the stack test results are available, the duct pressure or fan amperage shall be maintained within the normal range as established in most recent compliant stack test.
c. When, for any one reading, the duct pressure or fan amperage is outside the above mentioned range, the Permittee shall take a reasonable response. Section C - Response to Excursions and Exceedances contains the Permittee's obligation with regard to the reasonable response steps required by this condition. A reading that is outside the above mentioned range is not a deviation from this permit. Failure to take response steps shall be considered a deviation from this permit.

22. Condition D.1.16(f) requires that, "[t]o document the compliance status with Condition D.1.14, the Permittee shall maintain continuous temperature records (on a 3-hour average basis) for the thermal oxidizer (CD-01) and the 3-hour average temperature used to demonstrate compliance during the most recent compliant stack test…"

23. Condition D.1.16(g) requires that:

To document the compliance status with Condition D.1.15, the Permittee shall maintain daily records of the duct pressure or fan amperage for the thermal oxidizer (CD-01) and the duct pressure or fan amperage used to demonstrate compliance during the most recent compliant stack test. The Permittee shall include in its daily record when the readings are not taken and the reason for the lack of the readings (e.g., the process did not operate that day).

24. Condition E.1.2 identifies that the Subpart JJ requirements apply to the Facility.

25. On December 22, 2022, IDEM issued a Title V Permit Renewal to the Facility, Permit No. 053-45387-00058. This permit contains the same provisions described in Paragraphs 18 through 21, above.

Factual Background

26. AWC owns and operates a wood cabinet manufacturing facility at 4300 Eastside Parkway, Gas City, Indiana (the Gas City Facility).

Subpart JJ

27. The Gas City Facility is a major source of HAP which meets the definition of a wood furniture manufacturing operation and is subject to Subpart JJ.

28. On August 23, 2022, EPA conducted an on-site inspection of the Gas City Facility. During the inspection, EPA observed a bucket with half a lid which was storing cleaning materials. The equipment was not actively being cleaned when the open bucket was observed. EPA also observed that the water wash sludge storage bins had open tops.

29. On February 2, 2023, EPA sent an Information Request to the Gas City Facility pursuant to Section 114 of the Clean Air Act. Among other things, EPA requested the work practice implementation plan required by 40 C.F.R. § 63.803(a)(1), the inspection and maintenance plan required by 40 C.F.R. § 63.803(c), and the records required by 40 C.F.R. § 63.806(e).

30. In response to EPA's Information Request, AWC provided its Work Practice Implementation Plan. The Work Practice Implementation Plan does not include any details about initial or annual personnel training or a copy of the training program. It also does not contain any information about the washoff accounting form and recordkeeping required by 40 C.F.R. § 63.803(d). The Work Practice Implementation Plan states several of the work practice requirements outlined in 63.803(b) – (l) but does not provide any mechanisms for implementing the work practices.

31. In response to EPA's Information Request, AWC provided its Inspection and Maintenance Plan. The Inspection and Maintenance Plan restates the inspection and repair requirements of Subpart JJ but does not provide any detail as to how those requirements are implemented at the Facility. It also does not include any methods for documenting the date and results of each inspection and any repairs that were made.

32. In response to EPA's Information Request, AWC did not provide any records demonstrating that operator training has occurred; any records demonstrating that the inspection and maintenance required by 40 C.F.R. § 63.803(c) has occurred; nor any records demonstrating that multiple other provisions of the work practice plan are being followed (for example, the requirement to store all finish and cleanup materials in normally closed containers).

33. In response to EPA's Information Request, AWC provided records of cleaning materials used. These records show that AWC is using material which contains more than 8.0% by weight of VOC for cleaning spray booth components other than conveyors, continuous coaters and their enclosures, or metal filters, or plastic filters.

VOC Emission Limit

34. In the February 2023 Information Request, EPA requested the monthly actual VOC emissions of each emission unit and a description of the method used for calculating VOC emissions. AWC's response demonstrated that it was not using the equation provided in Condition D.1.8(b) of the Title V Permit, because it was subtracting recovered solvent. When the subtraction of recovered solvent is removed from AWC's calculated VOC emissions, the VOC emissions from Finishing Line 1 exceeded 249 tpy for eleven 12-month rolling periods:

12-Month Rolling Period	VOC Emissions per D.1.18 Equation (tpy)	Amount over 249 tpy limit (tpy)_
Feb-19 to Jan-20	249.94	0.94
Mar-19 to Feb-20	260.82	11.82
Apr-19 to Mar-20	270.45	21.45
May-19 to Apr-20	268.54	19.54
Jun-19 to May-20	259.06	10.06
Jul-19 to Jun-20	260.14	11.14
Aug-19 to Jul-20	260.01	11.01
Sep-19 to Aug-20	254.00	5.00
Oct-19 to Sep-20	249.76	0.76
Nov-19 to Oct-20	249.80	0.80
Dec-19 to Nov-20	246.76	N/A
Jan-20 to Dec-20	250.02	1.02

Duct Pressure

35. From November 28-30, 2017, AWC conducted testing to demonstrate the capture efficiency and destruction efficiency of the regenerative thermal oxidizer (RTO). During the capture efficiency testing, the average duct pressure was -1.87 inches of water (in H_2O). During the destruction efficiency testing, the average duct pressure was -1.88 in H_2O.

36. From October 18-19, 2022, AWC conducted testing to demonstrate the capture efficiency and destruction efficiency of the RTO. During the capture efficiency testing, the average duct pressure was -1.73 in H_2O. During the destruction efficiency testing, the average duct pressure was -1.69 in H_2O.

37. In the February 2023 Information Request, EPA requested the duct static pressures and documentation of the reasonable response taken for each reading outside the required range.

38. In its response to the February 2023 Information Request, AWC provided records of the duct static pressure measurements and responses.

a. The records indicated that AWC was comparing the daily measurements to "Within -1.90 range." Values both above (e.g. January 6, 2022) and below (e.g. January 3, 2022) -1.90 were marked as being within range. Values as high as -1.40 (e.g. February 2, 2022) were marked as "within range" on certain dates, but

values as low as 1.46 (e.g. September 27, 2022) were marked as out of range on other dates.

b. Multiple dates which were marked as out of range had no corrective action marked (e.g. August 17, 2022), or only "monitoring" as a corrective action (e.g. September 9, 2022).

RTO Temperature

39. During the October 2022 testing, the 3-hour average RTO temperature was 1,704°F. The test report is dated December 6, 2022. Therefore, by this date, AWC should have maintained the 3-hour RTO temperature at 1,704°F or greater. The 3-hour average RTO temperature has been below this temperature, for example from January 3 – 6, 2023, when it ranged from 1,695 – 1,701°F.

40. In the February 2023 Information Request, EPA requested the 3-hour average RTO temperatures. AWC did not have records of the 3-hour average temperature, and instead provided the minute-by-minute RTO chamber temperatures.

41. In the February 2023 Information Request, EPA requested documentation of the "reasonable response" taken for every RTO temperature outside the required range. AWC stated that the RTO is set to operate above 1,600°F, shuts off when the temperature is below that number, and the maintenance team investigates the cause of the shutdown. AWC provided a log of the shutdowns and the causes for the shutdowns. It did not provide any records of any responses taken for temperatures between 1,600°F and 1,704°F.

Violations

Subpart JJ

42. AWC failed to create an adequate work practice implementation plan, in violation of 40 C.F.R. § 63.803(a).

43. AWC failed to conduct personnel training, in violation of 40 C.F.R. § 63.803(b).

44. AWC failed to create an adequate inspection and maintenance plan, and failed to conduct inspections and repairs for equipment used to transfer or apply coatings, adhesives, or organic HAP solvents in violation of 40 C.F.R. § 63.803(c).

45. AWC used compounds containing more than 8.0% by weight of VOC for cleaning spray booth components other than conveyors, continuous coaters and their enclosures, or metal filters, or plastic filters, in violation of 40 C.F.R. § 63.803(f).

46. AWC failed to store all finishing and cleaning materials in normally closed containers, in violation of 40 C.F.R. § 63.803(g).

VOC Emission Limit

47. AWC failed to limit emissions from Finishing Lines 1, 2 and 3 to less than 249 tons per 12 consecutive month period when using the equation provided at Condition D.1.8(b), in violation of Condition D.1.2 of the Title V Permit.

48. AWC failed to use the equation provided at Condition D.1.8(b) to determine compliance with Condition D.1.2, in violation of Condition D.1.8(b).

Duct Pressure

49. AWC failed to establish the appropriate duct pressure, in violation of Condition D.1.15(a) of the Title V Permit.

50. AWC failed to take reasonable response steps to duct pressures marked as being outside the normal range, in violation of Condition D.1.15(c) of the Title V Permit.

RTO Temperatures

51. AWC failed to operate the RTO at or above the 3-hour average temperature as observed during the compliant stack test, and failed to take response steps when the temperature was outside the range, in violation of Condition D.1.14(c) and (d) of the Title V Permit.

52. AWC failed to maintain continuous RTO temperature records on a 3-hour average basis, in violation of Conditions D.1.14(a) and D.1.16(f) of the Title V Permit.

Environmental Impact of Violations

53. These violations have caused or can cause excess emissions of Ozone. Breathing ozone contributes to a variety of health problems including chest pain, coughing, throat irritation, and congestion. It can worsen bronchitis, emphysema, and asthma. Ground-level ozone also can reduce lung function and inflame lung tissue. Repeated exposure may permanently scar lung tissue.

MICHAEL HARRIS

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Michael D. Harris
Division Director
Enforcement and Compliance Assurance Division