

May 4, 2018

Michigan Department of Environmental Quality
Permits Section, Air Quality Division
PO Box 30260
Lansing, MI 48909-7760

**RE: Violation Notice
Axium Group, LLC,
SRN: A0703, Renewable Operating Permit (ROP) MI-ROP-A0703-2017**

Amanda Chapel:

On March 28, 2018, MDEQ, AQD, conducted an inspection of Axium Group, LLC (Axium) located at 708 Sherman Lane, Cassopolis. During the inspection, staff of AQD identified permit condition violations. A Violation Notice was issued on April 9, 2018. This letter is intended to serve as a written response to this Violation Notice. As noted in our May 3rd meeting, our Renewable Operating Permit (ROP), contains limits from multiple historic Permits to Install (PYI). This creates a complex document containing multiple coating material and emission limits. Wood finishing operations at Axium continue to evolve in response to market changes and customer requirements. Based on these changes, Axium has continued to advance from the proposed activities contained in early PTI applications. We continue to move forward from individual manual application spray systems, to dip coating applications, to automated surface coating lines. In association with these process changes Axium has experienced an increase in product transfer efficiency, a reduction in acetone used for equipment cleaning, and a reduction in per unit coating application. These advancements have also allowed Axium to continue to serve the needs of an expanding customer base. Although these advancements have resulted in enhanced product quality, they have also brought to light the complexity of the need to apply like coatings with variable application systems, subject to differing PTI established material limits. In order to keep pace with market requirements, Axium has established a need to pursue the incorporation of facility wide coating and emission limits in our ROP. It is our desire to prepare an application to combine the multiple existing PTI established material, and emission, limits into one set of limits applicable to our facility's operations. It is our hope that modification of our existing air permit will resolve the following list of violations identified in your April 9th, Violation Notice.

EUSANDER, Special Condition VI.1, "the permittee should be recording weekly pressure drop readings on EUSANDER during peak operating conditions." It is our position the EUSANDER meets the exemption requirements established in R 336.1285(2)(iv). This unit is not operated on a continuous schedule. Wood dust generated from this unit is controlled with a high efficiency internal bag filter system which exhausts the filtered air inside the plant. Compliance monitoring records for this unit were being maintained on this unit. Additional record keeping for this unit would not impact emission from this system. Axium intends to submit a permit modification application to establish this emission unit as Rule 285 exempt.



EUFLATLINE1, Special Condition II.1, "Material limit of the VOC content of Stains is 2.0 lb./gal (minus water) as applied. The facility has five (5) coatings which exceed this limit". Our current ROP contains different VOC content of Stain limits for different emission units. VOC content limits above 2.0 are currently permitted for specified emission units operated at our facility. Further information identifying the coatings in question, and the associated application systems, is needed to address this citation. It is possible that many of the coatings in question are no longer in use, or are applied on emission units with Stain content limits in excess of 2.0 lb./gal. In an effort to reduce confusion, Axium intends to submit a permit modification application to establish a facility wide VOC content of Stain limit for our operations.

EUFLATLINE1, Special Condition II.3, "Material limit of the VOC content of UV Stains, Sealers, and Topcoats is 4.7 lb/gal (minus water) as applied. According to Method 24 testing, the UV Topcoat has a VOC content of 5.0 lb/gal, minus water". The applications for the PTIs for the use of UV coatings on our Flat Lines was not based on Method 24 analytical. The results of Method 24 analytical for our high usage coatings indicate the VOC content of our UV Topcoat to be in compliance with our material limits as applied, when water and exempt solvents are subtracted as non-regulated. In an effort to reduce confusion, Axium intends to submit a permit modification application to establish facility wide VOC content of Stain, Sealers and Topcoats limit for our operations.

EUFLATLINE1, Special Condition VI.1, "Facility's current method of recordkeeping is insufficient to show compliance with the permit." As stated and agreed in our May 3rd meeting, Axium maintains extensive record keeping on the coating content and coating usage at our facility. Multiple summaries have been compiled in an effort to provide the level of individual and combined detail contained in our multiple PTIs. As requested in our May 3rd meeting, an example of the MDEQ desired format for the extensive level of records required to "show compliance" with our limits is requested. With this requested guidance, a revised recordkeeping format will be developed, maintained, and made available.

FGFACILITY, Special Condition VI.1. "Facility's current method of recordkeeping is insufficient to show compliance with the permit." As requested in our May 3rd meeting, an example of the MDEQ desired format for the extensive level of records required to "show compliance" with our limits is requested. With this requested guidance, a revised recordkeeping format will be developed, maintained, and made available.

FGWOODCOATING, Special Condition I.2, "The acetone limit for FGWOODCOATING is 89.9 tons in a 12-month rolling time period." Adding up EUWOODCOATING and EUREPAIRBOOTH, overages were found in January through March, 2017. Acetone is used as the primary cleaning solvent in all coating operations. Acetone usage is tracked by purchase records. A significant volume of the acetone purchased in 2016 and early 2017 was used for equipment cleanup do to an increase in coating color changes. A vast amount of this acetone is incorporated into our hazardous waste stream and shipped off-site for fuels blending. The acetone contained in our hazardous waste stream did not result in emissions. This volume of acetone sent off-site for further use was not subtracted from our acetone purchase records and

therefore, resulted in an over statement of acetone emissions when based on purchase records. An acetone analysis was conducted on our current hazardous waste stream to establish an acetone recovery factor. Following consideration of the acetone sent off-site for energy recovery, acetone emissions from our operations did not exceed the permitted limits. A revised recordkeeping format, including this recovery factor, will be incorporated into our recordkeeping to be maintained and made available. A copy of the updated records is provided.

FGWOODCOATING, Special Condition II.1, "Material limit of the VOC content of Stains is 3.4 lb./gal (minus water) as applied. Method 24 testing showed three (3) stains are above this limit". The PTI applications for the use of these coatings was not based on Method 24 analytical. Our current ROP contains VOC content of Stain limits that are expressed in lb/gal (minus water). The term "minus water" is ambiguous. Method 24 analytical results indicate that the "as applied" coating formulations comply with the permitted formulation limits when water and exempt solvents are subtracted from the total VOC's, on a per gallon basis. Method 24 analytical results only list VOC contents in excess of our permit limits as a scaled "less water" calculation. This scaled calculation would not result in a gallon of coating "as applied" formulation. In an effort to reduce confusion, Axium intends to submit a permit modification application to establish a facility wide VOC content of Stain limit for our operations.

FGWOODCOATING, Special Condition VI.1, "Facility's current method of recordkeeping is insufficient to show compliance with the permit." As requested in our May 3rd meeting, an example of the MDEQ desired format for the extensive level of records required to "show compliance" with our limits is requested. With this requested guidance, a revised recordkeeping format will be developed, maintained, and made available.

FGDIPTANKS, Special Condition V.1, "Method 24 testing is required on an annual basis of the most frequently used stain." Axium has eliminated all but one (1) 35-gallon capacity, low surface area dip tank. The coatings used in this tank are water based. Monthly coating emissions from this process are consistent at below 250 pounds of VOCs. Total actual VOC emissions from our dip coating operations in 2017 were below 0.9 tons. This is well below the uncontrolled exempt threshold level of 1000 pounds per month established in Rule 290. Method 24 analytical was not conducted on the dip coating do to the low volume usage, and low VOC emissions from this process. Axium intends to submit a sample of our dip coating for Method 24 analytical evaluation to correct this citation.

FGDIPTANKS, Special Condition VI.1, "Facility's current method of recordkeeping is insufficient to show compliance with the permit." As requested in our May 3rd meeting, an example of the MDEQ desired format for the records required to "show compliance" with our limits is requested. With this requested guidance, a revised recordkeeping format will be developed, maintained, and made available.

As is common in the wood finishing industry, the production operation of coating application systems frequently varies from that which is anticipated in the PTI application prior to construction. In an effort to create a document that reflects ongoing operating conditions, Axium

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intends to apply for a modification to our ROP to incorporate facility wide coating content and emission limits. This modification is intended to allow for easily verifiable facility wide recordkeeping and reporting. With the requested guidance from your office, and implementation of proper planning strategies, Axium will continue to strive to meet the needs of our expanding customer base while maintaining the necessary records to demonstrate compliance with our applicable compliance requirements.

It is our hope that this response adequately addresses the points of concern identified in your April 9th, Violation Notice. Should you have any further questions, please do not hesitate to contact me at 574-264-3174, or Doug Elliott, D&B Environmental Services, Inc. at 574-674-0161. Thank you for your consideration in this matter.

Sincerely,

A handwritten signature in black ink, appearing to read 'Jeffrey W. Schwartz', with a stylized flourish at the end.

Jeffrey W. Schwartz
President
Axium Group, LLC