

## UNITED STATES ENVIRONMENTAL PROTECTION AGENCY REGION 4 ATLANTA FEDERAL CENTER 61 FORSYTH STREET ATLANTA, GEORGIA 30303-8960

March 23, 2023

Mr. Mike Wilson Kronospan, LLC 1 Kronospan Way Eastaboga, Alabama 36260

Dear Mr. Wilson:

This letter is in response to your request dated February 8, 2023, regarding a proposal to use a production-based compliance option for conveyor strand dryers which will be installed in Eastaboga, Alabama. The proposed dryers will be subject to Title 40 C.F.R. Part 63, Subpart DDDD - National Emission Standards for Hazardous Air Pollutants: Plywood and Composite Wood Products.

Based on a review of your submittal, EPA R4 denies your request to use a production-based compliance option for the dryers to demonstrate compliance with Subpart DDDD. Details regarding the basis for our determination are provided in the remainder of this letter.

## Kronospan's Description of Dryer and Regulatory Review

Kronospan proposes to install four conveyor strand dryers at its oriented strand board plant in Eastaboga, Alabama, and recognizes that 40 CFR Part 63, Subpart DDDD, does not include a production-based compliance option for conveyor strand dryers. The Subpart defines a conveyor strand dryer as "a conveyor dryer used to reduce moisture of wood strands used in the manufacture of oriented strand board." It also defines a conveyor strand dryer zone as "each portion of a conveyor strand dryer with a separate heat exchange system and exhaust vents. Conveyor strand dryers contain multiple zones, which may be divided into multiple sections."

As you note in your submission, a conveyor strand dryer is required to meet the Add-on Control Systems Compliance Options in Table 1B to Subpart DDDD. You claim the proposed dryer cannot be defined using any of the dryer types identified in Table 1B to Subpart DDDD. As a result, you request an alternative Production-Based Compliance Option listed in Table 1A be established for the proposed dryer. You provided a detailed description of the dryer operation, presented a proposed methodology for establishing the production-based option, and proposed a production-based limit for the dryer.

The proposed conveyor strand dryer may consist of up to 16 zones, where each zone will have its own indirect heat exchanger (hot water supply to heat the air for the drying process). The total exhaust air flow rate for each zone will be vented to the atmosphere through a *common stack*, via seven individual dust collectors. You indicate that the total hazardous air pollutants (HAPs) from the drying operation can include acetaldehyde, acrolein, formaldehyde, methanol, phenol, and propionaldehyde. Using HAPs emission factors developed by the National Council for Air and Stream Improvement, Inc., for Oriented

Strand Board (OSB) Dryers, you present an estimate of total HAPs emission rate (Total HAPs per oven dried ton [ODT]) based on a hybrid representation which combines ratioed emissions from multiple type of dryers (*e.g.*, rotary and conveyor). Finally, you request a Production-based Compliance Limit of 0.18 pound per oven-dried-ton (lbs/ODT) (average over all four dryers), which is equivalent to the emission standard established for a rotary strand dryer in Table 1A to Subpart DDDD.

## **EPA's Review of Subpart DDDD**

Under 40 C.F.R. § 63.2231, Subpart DDDD applies to facilities which are major sources of HAP emissions and own or operate a plywood and composite wood products (PCWP) manufacturing facility which "manufactures plywood and/or composite wood products by bonding wood material (fibers, particles, strands, veneers, etc.) or agricultural fiber, generally with resin under heat and pressure, to form a structural panel or engineered wood product, which includes facilities that manufacture dry veneer and lumber kilns located at any facility. Plywood and composite wood products include, but are not limited to, plywood, veneer, particleboard, oriented strand board, hardboard, fiberboard, medium density fiberboard, laminated strand lumber, laminated veneer lumber, wood I-joists, kiln-dried lumber, and glue-laminated beams."

Under 40 C.F.R. § 63.2232(a-b), Subpart DDDD applies to "the collection of dryers, refiners, blenders, formers, presses, board coolers, and other process units associated with the manufacturing of plywood and composite wood products. The affected source includes, but is not limited to, green end operations, refining, drying operations (including any combustion unit exhaust stream routinely used to direct fire process unit(s)), resin preparation, blending and forming operations, pressing and board cooling operations, and miscellaneous finishing operations (such as sanding, sawing, patching, edge sealing, and other finishing operations not subject to other national emission standards for hazardous air pollutants (NESHAP)). The affected source also includes onsite storage and preparation of raw materials used in the manufacture of plywood and/or composite wood products, such as resins; onsite wastewater treatment operations specifically associated with plywood and composite wood products manufacturing; and miscellaneous coating operations (§ 63.2292). The affected source includes lumber kilns at PCWP manufacturing facilities and at any other kind of facility."

Under 40 C.F.R. § 63.2232(c), an affected source is a new affected source if you commenced construction of the affected source after January 9, 2003, and you meet the applicability criteria at the time you commenced construction.

Under 40 C.F.R. § 63.2292, conveyor strand dryer means "... a conveyor dryer used to reduce the moisture of wood strands used in the manufacture of oriented strand board, laminated strand lumber, or other wood strand-based products. A conveyor strand dryer is a process unit."

Table 1A to Subpart DDDD notes "There is no production-based compliance option for conveyor strand dryers."

Table 1B to Subpart DDDD specifies that for conveyor strand dryer zones one and two at new affected sources, you must demonstrate compliance by using an emissions control system.

## **EPA's Determination**

Subpart DDDD does not specify a production-based compliance option for total HAPs for conveyor strand dryers in Table 1A to subpart DDDD. Your claim suggesting that the proposed dryer cannot be defined using any of the dryer types identified in Table 1B to Subpart DDDD is unsubstantiated since Table 1B specifically lists *conveyor strand dryers*. Additionally, for conveyor strand dryers, Table 1B to Subpart DDDD specifies that you must demonstrate compliance by using an emissions control system. For this reason, EPA R4 is unable to approve your proposed alternative total HAP production-based compliance options request. However, EPA's Office of Air Quality Planning and Standards possesses the authority to give your request additional consideration and would be the appropriate contact to provide a determination given the circumstance. Please submit your request to:

Ms. Penny Lasseter, Director Sector Policies and Program Division Mail Code: C404-04 Research Triangle Park, NC 27711

The review of your regulatory interpretation request was coordinated with the EPA Office of Enforcement and Compliance Assurance and the EPA Office of Air Quality Planning and Standards. If you have any questions about the response provided in this letter, please contact Mr. Tracy Watson of my staff at (404) 562-8998 or by email at watson.marion@epa.gov.

Sincerely,

ANTHONY TONEY Digitally signed by ANTHONY TONEY Date: 2023.03.23 10:33:03 -04'00'

Caroline Y. Freeman Director Air and Radiation Division

cc: Lisa Cole, ADEM John Cox, EPA OECA Katie Hanks, EPA OAQPS