Docket Office Office of Pollution Prevention and Toxics Environmental Protection Agency 1200 Pennsylvania Avenue, N.W. Washington, DC 20460–0001

RE: Asbestos Part 1: Chrysotile Asbestos; Regulation of Certain Conditions of Use Under Section 6(a) of the Toxic Substances Control Act (TSCA) EPA-HQ-OPPT-2022-0057

This letter is in follow-up to Chemours January 18, 2023, meeting with EPA regarding the abovereferenced docket and provides additional information related to our discussion highlighting the needs of the Chemours' Titanium Technologies business with respect to asbestos gaskets.

Chemours Titanium Technologies is the world's largest producer of high-quality titanium dioxide, a key component in pigments for architectural and automotive coatings, plastics, laminates, and paper. Chemours manufactures titanium dioxide pigments at two manufacturing facilities in the United States, which employs over 2,000 employees and full-time contractors. From these two manufacturing facilities, Chemours supplies a significant portion of the U.S. domestic titanium dioxide market.

Chemours has had an overall decrease of the number of asbestos-containing gaskets (ACGs) used across all our facilities over the last decade. The ACGs that remain in place to date at our domestic U.S. manufacturing facilities require additional time to transition to asbestos-free alternatives. The remaining equipment faces challenges from the stresses needed to adequately seat the alternative asbestos-free gaskets to prevent leakage of the corrosive materials used in our production processes. Chemours has an active program for the redesign and fabrication of equipment for our U.S. sites to ensure these facilities' equipment can accept alternative gaskets that will provide the required sealing characteristics.

In light of this, the timeframe proposed in 751.X05 Restrictions on Conditions of Use will likely result in a significant disruption at our manufacturing facilities in the U.S and a disruption overall to the domestic titanium dioxide supply chain. This disruption to the critical chemical production of raw titanium dioxide pigment will further result in supply chain disruptions of the consumer articles that require titanium dioxide as an integral component, thereby impacting both the U.S. economy and the U.S. consumer. To safeguard the supply chain from these potential disruptions, Chemours requests 60 months from the date of promulgation of the final rule to allow for the fabrication and installation of equipment that will enable Chemours to complete a safe and successful transition to asbestos-free gaskets. An outline of the transition actions and anticipated timeline is provided below:

- 1. Procurement and fabrication of non-asbestos materials
 - The procurement and fabrication steps of the timeline will allow Chemours to acquire the necessary products to retrofit two titanium dioxide facilities. The redesigned equipment will rely heavily on nickel, which has experienced an interrupted supply chain for the past few years and is not easily procured on a reliable basis. Fabrication is done by shops that have experience with nickel alloys and appropriate service equipment. Chemours has begun the procurement for the non-asbestos materials, and this workstream will be in place while we are simultaneously working on the next steps of

the transition. We anticipate that the procurement of nickel as well as other essential pieces to the retrofit and new design will take a significant amount of time to acquire. We have used the last three years of our procurement and transition experience as the basis for our estimates. Chemours understands that other industries undergoing the transition away from asbestos (including the chlor-alkali industry) will also be trying to source nickel, and that the already interrupted supply chain will tighten. Chemours is committed to the transition away from ACGs and completing this work within the proposed timeline of 60 months, but procurement of necessary materials may be outside of the company's control and could cause delays that slow down the entire transition. If we face any significant procurement challenges that would alter our expected timeline, we will communicate that with EPA.

- 2. 6 months to complete import of asbestos materials
 - The importation period will allow Chemours to import additional asbestos sheets to sustain our processes throughout the length of the transition.
 - We currently acquire our asbestos in sheet form from a seller in China. In 2022, the supply chain for raw asbestos material to fabricate chrysotile asbestos-containing sheet gaskets in China experienced disruption from the Ukraine-Russia war. Today the expected timeline for receiving finished chrysotile asbestos-containing sheet in the United States is about 4 months from when the order is placed.
- 3. 9 months for processing and distribution of ACGs
 - Chemours utilizes a contractor in the United States to cut our precise gaskets from asbestos sheets. The added time for processing allows this contractor to complete the cutting and delivery for all anticipated gaskets needed to sustain our processes throughout the length of the transition.
- 4. 30 months for design
 - The design period will allow us to re-engineer our facilities to accommodate the best available alternative to asbestos. At this time, there is no alternative available on the market, which has driven Chemours to do extensive research and development to determine the best alternative. We believe that a viable alternative will work, but the asbestos-free product requires us to redesign and retrofit our facilities to accommodate the transition fully away from ACG usage.
- 5. 15 months of for install, certification, and testing
 - This installation, certification, and testing period includes the time needed for the installation to occur at both Chemours U.S. titanium dioxide manufacturing facilities. The extended length of this installation timeline is a necessity, as there we will need to establish a team of experts to handle the install. We require the installation to happen over an extended period of time to minimize outages at our facilities and limit disruption to the domestic titanium dioxide supply as a whole. This will also allow us to stagger the installation step at each site to further minimize any disruption to the already strained titanium dioxide supply chain. We expect the same team of experts to

oversee the installation process at both of our domestic sites. As stated previously, the installation, certification, and testing period (step 5) timeline cannot begin until materials procurement is complete, which could delay the start of this process by a year or more.

The equipment that needs to be modified is fabricated from carbon steel and nickel alloys. The design, procurement, fabrication, and quality certification take approximately 30 months per production line. To reduce the transition time, we plan to have a parallel effort for the 4 lines going through the equipment modifications taking place on a staggered basis. Based on current supply chain conditions and fabricator backlogs we expect to have all equipment in place with transition completion after 60 months.

	1Q23	2Q23	3Q23	4Q23	1Q24	2Q24	3Q24	4Q24	1Q25	2Q25	3Q25	4Q25	1Q26	2Q26	3Q26	4Q26	1Q27	2Q27	3Q27	4Q27	1Q28	2Q28
design																						
procurement																						
fabrication																						
installation																						
	Timeline influenced by material availability									у												
	Timeline controlled by Chemours																					

Total proposed transition time: 45 months + 15 months = 60 months.

As stated above, Chemours supplies a significant portion of the U.S. domestic titanium dioxide market. If the requested transition timeline is not granted to complete the transition away from ACGs, then we expect a result of a significant disruption at our manufacturing facilities in the U.S and a disruption overall to the domestic titanium dioxide supply chain.

Based these stated reasons to ensure a safe and successful transition, we request an equipment transition time of 60 months.