

**WRITTEN TESTIMONY OF JOHN D. ROMANO**

**BEFORE**

**THE U.S. HOUSE OF REPRESENTATIVES WAYS AND MEANS COMMITTEE**

**“THE NEGATIVE IMPACT OF CHINA’S UNFAIR TRADE PRACTICES ON THE U.S.  
TITANIUM DIOXIDE INDUSTRY”**

**MAY 9, 2023**

Good morning Chairman, Ranking Member, and Members. I am very grateful for the opportunity to testify today before the Committee on this important issue. Today, I would like to discuss the negative impact of unfair Chinese trade practices on the titanium dioxide industry and how that relates to the overall resiliency of the United States' industrial supply chain.

I serve as the co-CEO of Tronox Holdings, the world's leading *vertically integrated* producer of titanium dioxide more commonly referred to as TiO<sub>2</sub>. Our product is the base pigment that can be found in virtually all paints and coatings regardless of whether used for architectural, industrial, automotive, aerospace or military applications. It is also the key pigment that adds whiteness and opacity to many plastic products and is even a key component in US currency. TiO<sub>2</sub> is critical to nearly everything that is built or manufactured in this country. In Hamilton, Mississippi, Tronox operates the world's 5<sup>th</sup> largest TiO<sub>2</sub> production facility and in Oklahoma City, Oklahoma, we operate a world class R&D facility. But, we operate on a truly global scale. As a vertically integrated producer, we mine titanium-bearing ores in 5 mines located in South Africa and Australia, which after upgrading, are shipped as titanium feedstock to our 9 processing facilities around the world to be made into TiO<sub>2</sub>.

Our mines not only produce titanium ore but also valuable co-products, including the types of rare-earth minerals that have been identified as "critical minerals" under Executive Orders 13817 and 14017. Rare earth minerals are essential for both military and civilian uses. Tronox has historically sold its rare earth-containing tailings to Chinese processors where they ended up as "made in China" permanent magnets. For many years, China was the sole customer for rare earth minerals given its dominance of the rare earth supply chain. But thanks to the U.S.'s renewed commitment to strengthening its industrial base, Tronox is now considering building a rare earth processing plant in Hamilton, Mississippi aimed at supplying U.S.-based customers. It is our hope that the U.S. government will offer partial funding support for this initiative. Building a rare earth processing facility in Hamilton would enable Tronox to leverage its existing mineral resources in South Africa and Australia, as well as its human capital resources and technological expertise to strengthen U.S. national security as well as support good-paying manufacturing jobs here in the United States.

The Committee may also be interested to understand the relationship of the TiO<sub>2</sub> production process to titanium metal production, a second potential weak link in the U.S. military industrial base that our industry can help address. An intermediary product of TiO<sub>2</sub> production is titanium tetrachloride which is the necessary precursor for producing titanium metal. Though in the United States Tronox does not produce this intermediary product for merchant sales to metal producers, our plants in France and Saudi Arabia have this capability and we possess specialized technology for making metal grade titanium tetrachloride. Were the United States interested in reinvigorating its titanium metal industry, companies like Tronox would be essential for this effort to succeed.

The threat from China is a clear and present danger not only to our core TiO<sub>2</sub> business but to our plans to expand and grow our rare earth business in the United States. While China accounted for 36% of global TiO<sub>2</sub> production a decade ago, today China accounts for 52%. And China's

attempts to dominate the global supply of TiO<sub>2</sub> are just beginning. Based on our analysis of announced new plants, Chinese production could account for up to 70% of global demand by 2030 with growth in Chinese production far exceeding growth in global demand. In other words, we are seeing the classic Chinese playbook of creating enormous overcapacity to harm foreign competitors. In fact, when presenting at a recent industry conference, a senior executive of the largest Chinese producer of TiO<sub>2</sub> predicted that his company's growth would result in "the removal of capacity by western suppliers." Their plan couldn't be more clear.

The story relative to rare earth minerals is even more dire. Today, an estimated 92% of processed rare earth minerals and permanent magnets are produced in China, including the type of processing facility we would like to bring to Hamilton, Mississippi. China did not achieve this level of market dominance by accident. Though rich in mineral reserves, China has consistently sought to disrupt the normal functioning of the free market to serve its geopolitical ends. Global pricing for rare earth minerals has historically been driven by Chinese geopolitical goals and domestic policies, not supply and demand. For example, in 2010 China suddenly reduced export quotas by 40% on rare earth mineral exports and in doing so pushed global rare-earth prices sharply higher—in some cases tenfold. This type of market manipulation and price volatility is why U.S. companies seeking to enter the rare earth industry need U.S. support.

The unfair tactics and advantages deployed by Chinese producers in our industry is no different to what countless other U.S. manufacturing industries have experienced. For example, Chinese TiO<sub>2</sub> producers have endeavored to appropriate U.S. technology through criminal means to accelerate their capture of U.S. market share. In 2014 a federal jury in San Francisco found two individuals and one state-owned company guilty of economic espionage and theft of trade secrets for their roles in a long-running effort to obtain U.S. trade secrets related to the production of TiO<sub>2</sub>.<sup>1</sup> Many Chinese producers are either in part or wholly state-owned<sup>2</sup> and China's November 2016 5-year economic plan identified TiO<sub>2</sub> as a key industry,<sup>3</sup> which means producers can receive special treatment from government at the both the national and local level.<sup>4</sup> Discriminatory application or inadequate enforcement of bankruptcy laws mean that failing firms end up with restructuring plans that can be a form of *de facto* governmental support and prevents the shutdown of uneconomic producers as is allowed to occur in western economies. Moreover, Chinese producers benefit from lax Chinese environmental regulations compared to standards of the United States or indeed most western countries. With regard to solid waste, China has traditionally allowed large quantities of solid waste from TiO<sub>2</sub> production to be simply dumped

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<sup>1</sup> See <https://www.justice.gov/opa/pr/two-individuals-and-company-found-guilty-conspiracy-sell-trade-secrets-chinese-companies>.

<sup>2</sup> These companies include, Pangang Group Vanadium Titanium & Resources, The China National Nuclear Corporation (CNNC), Shandong Lubei Enterprise Group Corporation, China National BlueStar Co., to name a few.

<sup>3</sup> Circular of the State Council on Issuing the National 13<sup>th</sup> Five Year Plan for the Development of Strategic Emerging Industries, 29 November 2016, p. 18.

<sup>4</sup> For example see cooperative agreement with local government to develop titanium resources by China's largest TiO<sub>2</sub> producer. see <https://www.lomonbillions.global/lomon-billions-signs-strategic-framework-agreement-with-panzhihua-government-and-plans-to-invest-14-billion-rmb-usd-2-billion-in-mining-operations-in-panzhihua-city/>

in un-lined landfills and other solid waste containment facilities. In contrast, at our Hamilton, Mississippi facility, we expend substantial resources to comply with much tougher solid waste handling rules.

One aspect of China's trade practices relative to TiO<sub>2</sub> that may be of particular interest to this Committee and stands in sharp contrast to Tronox is how titanium bearing ores are mined in Africa. As I noted, Tronox mines a considerable amount of titanium and rare earth bearing ore in the Republic of South Africa. Indeed, we employ approximately 2,200 individuals there not to mention the countless contractors and suppliers who depend on us. Not only do we mine ore, but we also operate sophisticated mineral separation and smelting operations which produce high quality titanium feedstock and pig iron, much of which is exported to the United States. Our mine closure plans are world-class, requiring the restoration of the local area's natural flora and fauna. And, we invest heavily in the communities where we operate. China's exploitation of Africa's titanium mineral resources is far different. As China exhausts its own titanium resources, it has turned increasingly to Mozambique where it exports huge quantities of unprocessed ore to China for mineral separation and upgrading. Not only are its mining practices far less environmentally friendly than ours, with minimal if any formal mine closure plans, but its lack of in-country processing deprives the local communities of employment and development opportunities.

One of the primary reasons that the United States TiO<sub>2</sub> Industry remains strong is attributable to decisive action taken by the Office of the U.S. Trade Representative ("USTR") under Section 301 of the Trade Act of 1974. Domestic production statistics in the United States compared to the European Union tell the story. In 2022, U.S. industry produced 1,176,000 tonnes of TiO<sub>2</sub>, which is a decrease of 9.5% versus 2017. Contrast that with the European Union. In 2017 the EU produced 976,000 tonnes of TiO<sub>2</sub> whereby by 2022, this amount had fallen to 763,000 tonnes, a 22% decline in only 5 years. In that same period, imports from China increased 82%. The impact on our immediate neighbor to the north, Canada, is even more dramatic. In 2017, Chinese imports supplied 15% of demand in Canada, whereas in 2022, Chinese imports supplied 38% of demand. The volume of exports from China into Canada nearly tripled in 5 years.

Moreover, USTR's Section 301 action covering TiO<sub>2</sub> has enabled Tronox to maintain an extraordinarily high degree of capital investment in the United States. We have increased capital investments in our Hamilton facility each year since the tariffs were imposed in 2018. We estimate that capital investment in the Hamilton facility has increased by 16.5% since tariffs were implemented. But for the Section 301 tariffs, we could not even consider building a rare earth mineral processing plant in Hamilton, Mississippi. Regulatory relief has also enabled us to increase Hamilton's aggregate employee payroll significantly as well as annual expenditures on service-related contractors. The lion's share of this expenditure goes to locally owned and operated small businesses which are the life-blood of the rural community where we operate. Finally, I wish to emphasize that during the five years the Section 301 relief there has been no negative impact to consumers. U.S. TiO<sub>2</sub> prices have increased at roughly the same rate as global TiO<sub>2</sub> prices and at a much lower rate than paint and coatings prices.

Despite China's efforts --- both legal and illegal --- to obtain U.S. TiO<sub>2</sub> intellectual property and its enormous investment in production capacity, USTR's Section 301 action has enabled U.S. producers like Tronox to remain viable. This, in turn, has generated enormous benefits for the local community where we operate and overall U.S. industrial resiliency. And if market conditions remain favorable and we are successful in obtaining government support, Tronox is well-positioned to consider building a rare earth processing facility in Hamilton, Mississippi that supports U.S. military supply chains and the defense industrial base. While Tronox is investing heavily to remain competitive both in the United States and globally, we are concerned that with the likely significant increase in Chinese TiO<sub>2</sub> production capacity that I described earlier, current Section 301 tariffs may not be high enough to prevent an uneven playing field in U.S. markets. In closing, I would ask that as part of its Four-Year Review of Actions under Section 301, USTR consider whether current tariff levels may be insufficient to prevent injury to our industry, particularly in light of China's track record of unfair trade practices, the strategic importance of our industry to U.S. supply chain resilience and excessive Chinese TiO<sub>2</sub> production capacity on the horizon. I ask for your support for this industry and others as we do our best to compete against Chinese unfair trading practices. Thank you for your time.