The inevitable impact of the Coronavirus on the world's rare earths supply.

written by Jack Lifton | February 8, 2020

Critical materials-based supply chains may be hanging by a thread, the thread of the size of existing Chinese inventories.

The coronavirus outbreak in China has had a foreseeable but unintended consequence. Truck drivers have refused to make deliveries into areas either identified as or suspected of harboring the disease.

This has interrupted not only the flow of minerals out of the affected areas but also the refining and manufacturing of metals, food, and fuel. Among the under-reported deficiencies thereby caused the most important ones for the global rare earths production and utilization industries is the interruption in the flow of chemical reagents necessary for refining rare earths and for producing metals, alloys, and magnets.

It cannot be overemphasized that the shutdown of a supply chain on purpose is time consuming, and its re-start even more so. Supply chains are not turned on and off with the flick of a switch.

The dependence of American and European manufacturing on the just-in-time delivery of components means that their industries maintain limited or even non-existent inventories. We do not know much about Chinese inventories, but we do know that they cannot be infinitely large.

If the coronavirus outbreak continues, we will soon learn a lot about the size of Chinese inventories providing, of course, that export from China does not also shut down (It is certainly slowing down).

Rare earth enabled components for moving machinery, such as automobiles, trucks, trains, aircraft, industrial motors and generators, home appliances, and consumer goods, almost all today come from China or Japan (which of course gest its rare earth magnets, alloys, phosphors, and catalysts from China). That flow is now slowing. This will have a domino effect on American and European industry. These items cannot be re-sourced due to China's monopoly of rare earths production and its monopsony of rare earth enabled component manufacturing.

We were told that even if the Chinese stopped the flow of rare earth enabled products to the USA in retaliation for tariffs it wouldn't matter. I said at the time that it would indeed matter.

Now we may have to face the consequences of such an interruption even if our countries have an amiable (or, better said, convenient) trade relationship.

There is an urgency now for the creation of a total domestic rare earth end-use products supply chain in the USA, Europe, and non-Chinese Asia.

The anchor of any such supply chain is a working mine-in this case many more than one, since we need both light and heavy rare earths, which are not usually found together in accessible, developable deposits.

The US Army's choice of vendors for its rare earths production solicitation is now more important than ever – the best projects must now be prioritized for development.

A domestic North American rare earth industry is now more important than ever.