ALUMINUN[1] WARS

(THINK THE MELLINIUM FULCRUM)

In 2122, landfill (aka garbage dumps) mining permits will be issued to mining companies. Why? Because that is where the mineral resources are located. How can this be?

Well…to begin…us humanoids place great value on things like oil[2] and diamonds[3] (to power our cars and to adorn our fingers). Both of these coveted resources had their beginnings here on earth…where great underground pressures and temperatures, pressure cooked the earth's available ingredients in its crust to the point where both resources were manufactured by nature in the past few 100 million's of years.

Theoretically these resources can continue to be manufactured but because of the length of time to complete the cooking process, they generally are considered to be non-renewable – once consumed, gone forever. Thus great value is associated with a product manufactured here on earth – and created in a relatively short period of time, at least compared to the age of the universe.

In contrast, ALL the elemental metals on earth – as well, as far as we know, the entire universe (such as aluminum, iron, copper, cobalt, sodium, tin and so on) – as well as all other chemical elements (atoms) found in the Chemist's Periodic Table, were created all at once near the Big Bang event. That event had enough pressure and temperature that caused subatomic particles (such as quarks and electrons) to bang together and create elements[4] and lighter created elements banging together to create heavier elements.

As the universe cooled shortly after the Bang, elements stopped being created[5] no more banging together. Thus, there isn't any new elemental metals (as well as all the other elements) being produced since the Big Bang. And elements can't be created here on earth because of the absence of a Big Bang energy furnace[6]. Given the fixed quantity of elements – once gone, there ain't no more – it doesn't take too much imagination to figure out ancient and fixed quantity[7] aluminum is arguably as valuable, if not more so, than recently created oil or diamonds.

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[1] Aluminum is the most abundant metal in earth's crust (~8%) – why household aluminum foil is so cheap and abundant; the crust's most abundant element is oxygen (46%).

[2] Oil – mainly composed of the elements carbon and hydrogen atoms, combine into various organic molecules (that could be solid, liquid or gas)

[3] Diamonds – elemental carbon atoms linked together in a solid crystal structure.

[4] The first and only true alchemists – converting one element to another such as lead to gold – can be credited to either the Big Bang or God. No other alchemist has succeeded since.

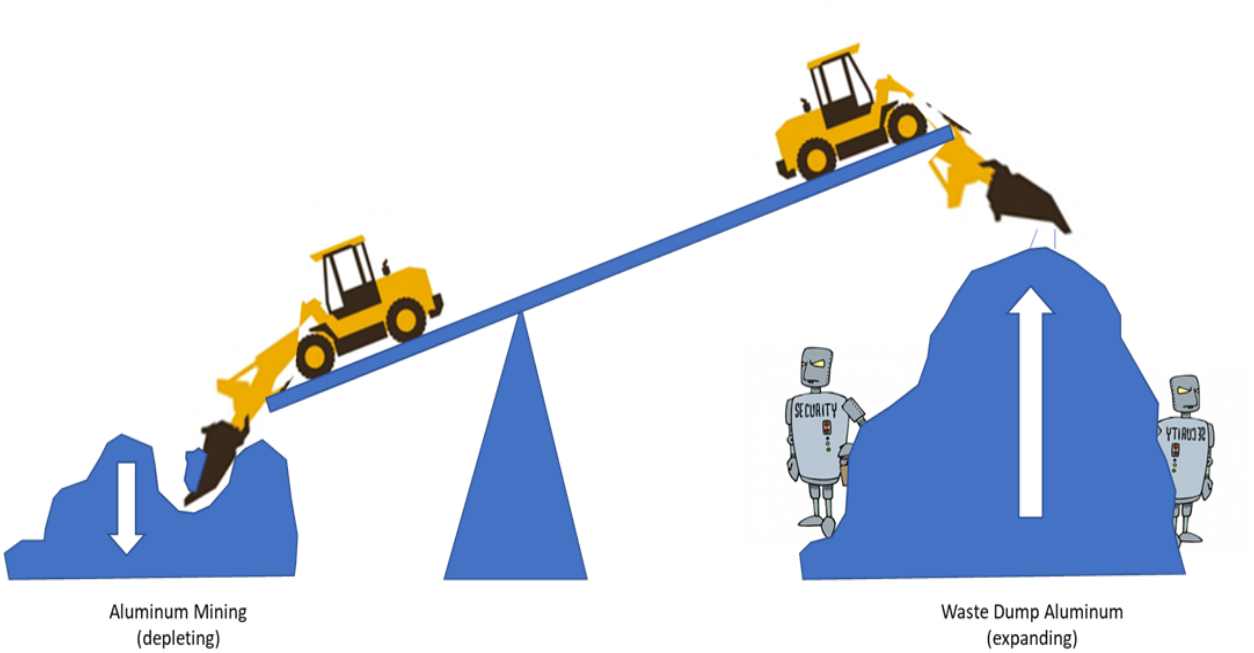
[5] Some exceptions to this end of creation message include (1) nuclear fusion, such as in earth's Sun, where lighter hydrogen is converted to heavier helium and (2) radioactive decay, where heavier elements decay to lighter elements.

[6] While creating a Big Bang event has some science fiction appeal to it…not sure how such would be controlled and managed. The large and powerful research colliders are good at banging things together and breaking them apart but not good at creating things.

[7] 'Precious' metals - elements (atoms) such as gold, silver, platinum, lithium, equally coveted by us humanoids as oil and diamonds, while being Big Bang products and not manufactured on earth, are in short supply but high demand, so economics drives up the prices of such.

Since all metals (and all elements) are a fixed quantity, and much of it ends up in landfills and waste dumps as us humanoids use them, eventually miners, who dutifully depleted earth's crust natural resource mines, will have to re-mine for those resources from the dumps as demand from consumers for aluminum (and all other fixed quantity elements) products continue to expand.

Maybe mining companies should start securing waste dump property rights.



The ole' adage that *whiskey is made for drinkin', water fightin'*[8], can easily be adapted to add – aluminum wars to that fightin' list.

[8] Mark Twain