Sludge Tracker

*Toxicus ad Infinitum**

The Adverse Impact of Land-Disposed *Toxic Sewage Sludge* on Human and Environmental Health

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In Brief:

Land-disposed *Toxic Sewage Sludge*, water-disposed wastewater effluents, and the land or water disposal of other toxic wastes, such as leachates from landfills, provoke a broad spectrum of adverse impacts on human and environmental health, noting well that nearly all chronic diseases are incited by long-term exposure to low levels of environmental contaminants and pollutants.

Our mismanaged wastes contribute to the global crises of climate change and pollution of our air, food, soil, and water, leading to famine, drought, compromised health, epidemics, deforestation, and lost biodiversity. No matter the source, kind or concentration of toxics in our wastes, whether in sludges from wastewater treatment plants, wastewater effluents, stormwater runoff, landfill leachates, industrial or medical wastes, or agriculture runoff, such as fertilizers, pesticides or wastes from concentrated animal feeding operations, the net result is environmental degradation. The consequences include a decline in readily available potable water supplies, aggravated further by climate change and population growth.

It's all about the reluctance of agencies to safely manage our produced, released, and ever-accumulating wastes, and it's about water - good, clean, potable water. Earth is a planet with surface water, and it resides at a steady state, meaning there will never be more or less water than we have now, and it's often in the wrong form or place. We need potable water for survival, yet today, nearly half the world-population is adversely affected by a shortage of fresh water, and such predicament incites disease, famine, food insecurity, wildfire, human migration, and war. Therefore, we must notice that it's all about the ready availability of clean water in the safeguarding of human and environmental health, which current infrastructure fails to do.

Deforestation must also end, for the fresh water provided by forests is the source stream of all life on Earth. Instead, we must add forests, for it is forests that generate fresh water, not melting glaciers, noting well that all aquifers are in decline. Diminishing forests and clean water sources, amid an expanding population with accumulating toxic waste, and impacted further by a changing climate, collectively set the scene for lost biodiversity and water scarcity, revealing that life on Earth is nearing a point of non-sustainability, and we did it. The wetter areas of Earth are now wetter, while the drier regions drier, offering a deadly crisis situation for survival.

We can act by protecting our air, food, soil, and water from contamination and pollution, or we can bear witness to an alarming decline of our life-sustaining resources. The climate is changing and the population is increasing, while we continue to contaminate and deplete our critical fresh waters, never seeking alternatives or improvements for proper management of our growing toxic wastes.

The anticipated outcome of our failings equates with food and water insecurity, for we cannot desalinate the sea as a solution. While forests are the single greatest producers of fresh water on Earth, it is we who represent the core causal agent of the global water crisis. By contaminating and polluting our critical forests, food lands, and waters, we are thereby the actual destroyers of us, for it is the sum total of all causal factors in a person's life-long toxic exposure experience that incites cancer and other chronic diseases, and those factors include exposure to *Toxic Sewage Sludge*, toxic wastewater effluents, harmful fertilizers and pesticides, landfills, landfill leachates, and legacy landfills and their leachates, plus the raft of industrial chemicals wafted far and wide upon the winds to collectively assault our personal health. Solutions to this health and environmental crisis do exist. All we need do is become aware and pursue them.

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