

Comment Letter to EPA Re: Draft National Water Reuse Action Plan

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Comments by Darlene Schanfald, Ph.D

I work on sewage waste issues. I have tracked the issues related to sewage solids ("biosolids") since the year 2000. During this past decade I have tracked issues related to "recycling"/"reclaiming" sewage wastes.

It is understandable, and necessary, to refrain from effluent being emitted into surface water bodies. 16,000 wastewater processing facilities in more than 160 U.S. cities, and more if we add in private processing facilities, have been poisoning marine ecosystems for decades. This is causing toxic blooms and oxygen deprived marine animals and plants. This has sent PFAS, micro plastics and 90,000 chemicals into marine systems. The toxic "processed plant" constituents (which you call "treatment plants," but they treat little) have poisoned marine systems, as well as soils -- farm, recreational and forest - where the effluent has been spread. But seeking to poison drinking water and aquifers is no answer.

First, no one knows all that is in the toxic brews from the Plants, or what synergistic contaminants are created, or what the safety of the molecular breakdown of any one contaminant means. PAHs "de-molecularized" can be more toxic than the final product. Second, there is no guarantee that the combined "cleaning" methods - reverse osmosis, UV, fabrics, soil percolation, etc. -- are safe. Indeed, a University of WA professor informed Spokane meeting members on recycling waste waters that UV can cause more of a problem.

The EPA OIG determined that management controls put in place by the EPA to regulate and control hazardous chemical discharges from sewage treatment plants to water resources have limited effectiveness. The regulations were not effective in controlling the discharge of hundreds of hazardous chemicals to surface water, which then travel up the food chain to humans. and wildlife to feed upon.

https://www.epa.gov/sites/production/files/2015-09/documents/20140929-14-p-0363_glance.pdf

EPA's suggested cleansing actions will do better at cleaning but will not clean. Cleaner is not clean. Safer is not safe. Injecting this waste into aquifers is another way of spreading the poisons beyond intended points. Even holding wells deteriorate over time. Recall what happened in HI when a government avoided applying for a NPDES permit. Those were defective wells they sent the effluent to and the waste flowed to the open ocean.

EPA has used farm and grazing animals and soils from the land spreading of sewage solids as guinea pigs. The results about food uptake of sewage solids and effluent and

pathogens into the food have been published in numerous scientific journals. Case in point, recent CA figures on the state's reuse of its reclaimed water is estimated to be 13%, while 31% of it is sprayed on crop land. CA is the "salad bowl" of the U.S. The only time we hear of food-related illness or death is when there is a national alert to stay away from a certain food -- romaine lettuce being the latest (November 2019). Nevertheless, there are reported deaths and illnesses from breathing in sewage waste particulates. And PFAS in the waste poisoning daily cows in Maine.

The spreading of sewage wastes on land and in water systems can be regarded as the new "sentinel for human-health risks." Others have named this as such.

<https://phys.org/news/2014-01-sludge=sentinel-human-health.html>

There are multiple methods to remediate sewage effluent and there must be put in place ways to capture the effluent, keeping it from water bodies and soils and finding decontamination methods over years. Government needs to invest in such technology, not pass off the poison on the soils, into the air, into water bodies, or into wildlife and humans. The health pandemic will be enormous if EPA continues down the road it wished too. It will be beyond irresponsible.

Safer is not safe. Cleaner is not clean, Clear water in a glass is not clean water.

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