



August 22, 2008

To the Honorable Senator Barbara Boxer:

The Oregon Center for Environmental Health (OCEH) is a non-profit, membership-based organization in Portland, Oregon. Our mission is to protect public health and the environment by promoting alternatives to the use, manufacture, release and disposal of toxic chemicals.

The Oregon Center for Environmental Health applauds your upcoming inquiry into "biosolids". We are extremely concerned about the impact that sewage sludge may have upon the health of the public and the environment. After treatment for pathogens, biosolids may still contain many different hazardous substances, including antibiotics and pharmaceuticalsⁱ, mercuryⁱⁱ, endocrine disrupting compounds like phthalates and bisphenol Aⁱⁱⁱ, brominated flame retardants^{iv}, and nanoparticles^v.

We firmly believe that sewage sludge should be considered a hazardous waste, not an agricultural fertilizer. If you stop to consider the nature of the waste that is being spread on our crop lands it is really an ecological crime that is being perpetrated on us all as a safe alternative to dumping this waste into our waterways as was the practice prior to the Clean Water Act. Applying contaminated waste to our farmland reintroduces pollutants into the food chain and we are paying a big price as future generations inherit a contaminated food supply.

Additionally, there is a lack of specific information about what pollutants exist in various biosolids. This means that Americans lack information about what chemicals they may be exposed to through biosolid land applications. Current law also fails to require regular testing of the crop lands to ascertain accumulation of toxics such as mercury and phthalates over time.

We must begin to understand that the earth's carrying capacity for human waste is finite and that we have fouled our own nests to the point that all of our major U.S. waterways carry health warnings for public contact or for fish consumption. In any soil sample you care to take you can expect to find "background levels" of contaminants like mercury and dioxins. We can't just move contaminated waste from one place to another in some kind of macabre, toxic shell game. We have to look at the sources of these contaminants, implement plans to reduce and eliminate them, and employ new technologies to clean up the soil, air, and water that we have spoiled.

Thank you for tackling this extremely important issue and you can count on the Oregon Center for Environmental Health and our allies across the nation to support efforts to stop this dangerous and unsustainable practice.

Sincerely,

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ⁱ Wu Chenxi, Alison L. Spongberg, Jason D. Witter. Determination of the persistence of pharmaceuticals in biosolids using liquid-chromatography tandem mass spectrometry. *Chemosphere*, 2008, 06.026.

ⁱⁱ Hale, R.C. M.J. LaGuardia, E.P. Harvey, M.O. Gaylor, T.M. Mainor, and W.H. Duff. Persistent pollutants in land applied sludges. *Nature* 412:140-141.

ⁱⁱⁱ Kolpin, D.W., E.T. Furlong, M.T. Meyer, E.M. Thurman, S.D. Zaugg, L.B. Barber, and H.T. Buxton. Pharmaceuticals, Hormones, and Other Organic Wastewater Contaminants in U.S. Streams, 1999-2000: A National Reconnaissance. *Environmental Science Technology*. 36:1202-1211.

^{iv} Bradley Clarke et al. Polybrominated diphenyl ethers and polybrominated biphenyls in Australian Sewage Sludge. *Chemosphere*, 2008, 06.034.

^v Limbach et al. Removal of Oxide Nanoparticles in a Model Wastewater Treatment Plant: Influence of Agglomeration and Surfatants on Clearing Efficiency. *Environmental Science & Technology*, 2008; 0 (0): DOI: 10.1021/es800091f.