125 Airstrip Lane P. O. Box 539 Ophelia VA 22530 July 12, 2005

Sen. George R. Allen Russell Senate Office Building, Room 204 Washington DC 20510

Dear Sen. Allen:

I recently became aware of another article reporting human illness caused by the land-application of municipal sewage sludge. The article reported:

"The short and long-term behavior of biosolids has been studied extensively," EPA Regional Administrator Donald Welsh wrote in a June 16 letter to U.S. Sen. George Allen, who made an inquiry on Buchholz's behalf. "... Available evidence indicates that when biosolids are properly used or disposed of according to all federal and state regulations, there are no significant risks to public health or the environment."

I am not a health professional, but it is clear to me as a scientist that some individuals are sufficiently sensitive to pathogens/ allergens/etc. in sludge to be at risk, just as most people are not allergic to peanuts, but peanuts can kill other people. The statement that "... there are no significant risks to public health..." is false and EPA no longer claims that land-application poses no health risk.

Mr. Walsh's statement that the land application of sewage sludge causes "...no significant risk to.....the environment." is also blatantly false. In Virginia, sewage sludge is land-applied according to DCR regulations at a rate that provides about twice as much nitrogen as would be applied with chemical fertilizer because organic solids are such inefficient sources of nutrition for plants. The remainder of the nitrogen, amounting to nearly 100 pounds of nitrogen per acre, is pollution. In Virginia, land-application of sewage sludge caused to about 7 million pounds of nitrogen pollution in 2003. An essay on this issue can be found at <u>www.napsva.org</u> and additional data can be found on that web site in my public comments regarding DCR's purported stiffening of nutrient management regulations. Additionally, sewage sludge is very phosphorus-rich and land-application further overloads soils already nearly saturated with phosphorus (again, see the above web site for correspondence with Virginia officials, more detail on my allegations, and comments on nutrient management regulation changes.)

The Virginia Department of Health is openly violating the Virginia Administrative Code12VAC5-585-550.A "The applied nitrogen and phosphorous content of biosolids shall be limited to amounts established to support crop growth." Soil phosphorus concentrations are being ignored and sewage sludge is being landapplied only according to nitrogen and lime requirements. If the law were being obeyed, the land application of sewage sludge would be severely limited because of the phosphorus-rich nature of Virginia soils. I can document for you land-application to fields that tested Very High in phosphorus, and to which no sewage sludge should have been applied. The land-application of sewage sludge causes massive pollution by both nitrate and phosphate.

As you certainly know, the reason for the formal impairment of Chesapeake Bay is over-fertilization. It has been known for more than three decades that agriculture is the largest polluter of Chesapeake Bay, and the use of inefficient animal waste as fertilizer is the most polluting agricultural practice (see the June 2005 Bay Journal, for example.) Thus Mr. Welsh's implication that the land application of sewage sludge is environmentally benign is blatantly false. As an elected official, I request that you formally correct EPA and ensure that they no longer make these kinds of incorrect statements.

Yours sincerely,

Dr. Lynton S. Land Emeritus Prof. Geol. Sciences and E. Allday Chair, U. Texas Austin

Cc: Donald Welch, USEPA REGION 3, 1650 Arch Street, *Mail Code:* 3RA00, Philadelphia PA 19103-2029 Rep. Jo Ann Davis, 1123 Longworth House Office Bldg., Washington DC 20515