To: Betsy Bowles, DEQ, P. O. Box 1105, Richmond VA 23218 by email and US mail

- From: Dr. Lynton S. Land
- Re: Comments regarding 9 VAC 25-630, offsite management of poultry waste
- Cc: Sec. Natural Resources L. Preston Bryant, Jr.

At the very minimum, the land application of poultry litter should be subject to no less strict regulations than those that apply to the land application of municipal sewage sludge. These two sources of "free fertilizer" are very similar in their behavior with respect to nutrient (nitrogen and phosphorus) release when amended to soils and in order to protect water quality there is no reason that less strict regulations should apply to poultry litter. Poultry litter typically contains at least twice as much phosphorus as sewage sludge, and so phosphorus application rates must be reduced for poultry litter.

That said, imposing sludge-like regulations (instead of allowing unregulated application of approximately 80% of the poultry waste currently land-applied in Virginia, according to Russ Perkinson of DCR, 01/31/07) will not measurably improve water quality unless land application is limited by the "Soil Test P" method.

Even if all poultry litter is applied according to Nutrient Management Plans similar to those imposed on municipal sewage sludge, 10 million pounds of nitrogen will still be disposed on Virginia soils annually to NO BENEFIT OF CROPS. I have pointed this out to state officials repeatedly, for example in my letters of 02/13/07 to Sec. Bryant and Directors Paylor and Maroon, and in my article in the December 2006 Bay Journal, pp. 22-23, available on-line at <u>www.BayJournal.org</u> and presented in person to Sec. Bryant and the "Expert Panel" convened to study sewage sludge.

The present NOIRA is replete with statements that any changes in the current unregulated procedures must address"... potential effects of marketing and utilization of this valuable source of organic nutrients" and that "... less intrusive or costly alternative methods of achieving the purpose of the regulation" should be elucidated. The State even facilitates "... the marketing of the poultry waste in the Commonwealth."

Land application is the simplest and cheapest way to dispose of an unwanted product, to the detriment of water quality in Chesapeake Bay. The emphasis in the NOIRA is on the bottom-line for farmers and poultry growers and nowhere is there any evidence that the State has any real concern for the majority of citizens of Virginia who want improved water quality in Chesapeake Bay. Any realistic cost-analysis must include the economic costs of the nutrient pollution of Chesapeake Bay caused by the use of such efficient forms of fertilizer. The cost of regulation to farmers or the poultry industry is easy to document, as was done for sewage sludge in JLARC Report No. 89, "Review of Land Application of Biosolids in Virginia," and as I summarized in an article in the May 2007 Bay Journal. But the cost to the public of unsatisfactory water quality in Chesapeake Bay, as it affects property values, recreational and commercial fishing, etc. is not addressed by the State. The annual value of the Bay to the US economy has been estimated to be as high as \$1 Trillion, and it is obvious that, irrespective of whose numbers are accepted, the poultry industry is of trivial economic value to Virginia compared to the value of a healthy Bay.

If the State truly wants to improve water quality in Chesapeake Bay and promote measurable improvements in water quality, rather than continue to benefit minority "stakeholders" (the agricultural community and poultry growers) then the solution is not merely to impose restrictions similar to those applied to sewage sludge, but to ban the process of land application altogether.

I request that all previous letters as well as the two articles in the Bay Journal cited in this public comment be entered into the public record. They are all posted at <u>www.VaBayBlues.org</u>. This letter will also be posted at <u>www.VaBayBlues.org</u> along with any formal written reply that may be received.

 Dr. Lynton S. Land, Emeritus Prof. of Geological Sciences and E. Allday Centennial Chair in Subsurface Geology, Univ. Texas at Austin, and past president, Northumberland Association for Progressive Stewardship (NAPS), <u>www.napsva.org</u>
P. O. Box 539, Ophelia VA 22530 (804) 453-6605 voice and fax JandL@rivnet.net