



COMMONWEALTH of VIRGINIA

Office of the Governor

L. Preston Bryant, Jr.
Secretary of Natural Resources

P.O. Box 1475
Richmond, Virginia 23218

February 28, 2007

Dr. Lynton S. Land
Post Office Box 539
Ophelia, Virginia 22530

Dear Dr. Land:

Thank you for your letter of February 13, 2007, and your continued interest in improving Virginia's water quality. This letter will serve as a response from Directors Paylor and Maroon as well. First, I will address your six opening tenets. We are largely in agreement with these statements.

1. Concur.

2. Much of the nitrogen applied in sewage sludge or manure is not in plant-available forms. Organic nitrogen is approximately the TKN minus the ammonium nitrogen. Plant available nitrogen values are obtained by calculating the fractions of ammonium and organic nitrogen that will be available to the immediate crop. Not all of the nitrogen that is unused by the crop is lost to the environment as some of the organic nitrogen forms are resistant to decomposition and likely remain in soils for very long times. Because of soil sequestration not all "excess" nitrogen is lost. Losses to the environment would also include inert N₂ gas that we would not consider to be a pollutant. Because of the slow release nature of organic nutrient sources, nitrogen application rates are not determined in exactly the same manner for organic sources as for inorganic sources.

3. Concur.

4. According to the Census of Agriculture, there are approximately 4.3 million acres in total farm cropland in Virginia. If biosolids are applied to roughly 50,000 acres per year, the resulting percentage receiving biosolids is slightly more than 1%. We are not in a position to speak to the overall profitability of Virginia agriculture, with or without biosolids.

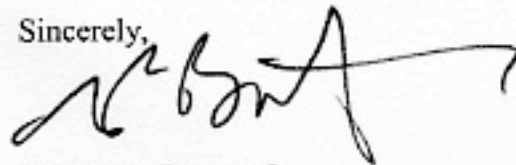
5. While we have no reason to question your assumed costs of landfilling and quantities of sludge generated, we have not specifically verified all of the costs and quantities you cite.

6. We substantially concur with your first statement, but have not confirmed the projected cost to upgrade Blue Plains.

Concerning your request to enforce provisions of 12VAC5-585-550.A., you are likely aware that legislation approved by the 2007 General Assembly effectively transfers regulation of biosolids from the Board of Health to the Department of Environmental Quality and the Water Control Board on January 1, 2008, contingent upon the appropriation of adequate resources to administer the program. While the Biosolids Use Regulations are not presently within the scope of responsibilities of the Secretariat, I will advise the staffs of DEQ and DCR to consider the phosphorus issues you raise as new regulations are recommended to the Water Control Board upon transfer of the program from the Board of Health.

You mention concerns with animal waste management in your letter and suggest that animal waste applications be banned. I would like to make you aware of the strategies I have proposed in the February 12, 2007, "Report on the Chesapeake Bay and Virginia Waters Clean-up Plan," a copy of which is available online at www.naturalresources.virginia.gov/Initiatives/WaterCleanupPlan/. Since poultry litter is the most significant nutrient source of the land applied manures in Virginia, I have proposed several strategies to improve oversight of poultry litter applications and use of aggressive feed management technology to reduce phosphorus in manure. While this report does not suggest a widespread banning of land applications of animal manure, I would appreciate your thoughts on my proposals to deal with this issue.

Sincerely,



L. Preston Bryant, Jr.

LBPJr/cbd

c: The Honorable Marilyn B. Tavenner,
Secretary of Health and Human Resources
The Honorable Robert J. Wittman, Member,
Virginia House of Delegates
Joseph H. Maroon, Director,
Department of Conservation and Recreation
David K. Paylor, Director,
Department of Environmental Quality