

P. O. Box 539
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August 5, 2010

Mr. Douglas W. Domenech, Sec. Natural Resources
Patrick Henry Bldg, 1111 E. Broad St.
Richmond VA 23219

Dear Sec. Domenech:

Thank you for your letter of June 30 regarding Commonwealth policy that regulates the land application of animal waste. This letter is to ensure that you and the new Governor are aware of past history and have no delusions about the science regarding the huge impact existing regulations have on sanctioning the use of such an inefficient fertilizer and the massive Bay pollution it causes. The disposal of animal waste by land application causes 25% of Chesapeake Bay nutrient pollution according to EPA. In my comments to DEQ regarding Abatement Permit #00816 (posted on www.VaBayBlues.org) I documented that the nitrogen pollution caused by a 2004 disposal of sewage sludge in Northumberland County (VDHBUR 90) was approximately 200 pounds per acre. Soil tests from all the fields that received sludge tested "Very High" in phosphorus, meaning that no phosphorus was required to grow the next crop. Yet more phosphorus was disposed (147 pounds per acre) than is recommended for fields having no phosphorus in the soil (120 pounds per acre)! Disposal violated Virginia law (9VAC25-32-600) "The applied nitrogen and phosphorous content of biosolids shall be limited to amounts established to support crop growth." There can be no explanation for disposing of more phosphorus than crops can possibly use on fields already containing enough phosphorus for crop growth, to the detriment of water quality, except to protect the profits of special interests involved in the production and land application of animal waste.

You wrote that the amendments to biosolids regulations "... were the result of a stakeholders group convened in 2007 ..." The Biosolids Technical Advisory Committee established by DEQ, when oversight was transferred to DEQ from VDH, consisted of 16 members, half of whom represented agriculture and generators or appliers of waste. Three citizen members, nearly all the committee members who did not represent special interests or the government, resigned on May 18, 2009. Their letter of resignation is

attached. In no way did the regulatory development process you cite fairly represent citizens of the Commonwealth. The recent committee charged with modifying regulations regarding the land application of poultry litter was similarly stacked, consisting of 11 supporters of land application, 4 detractors and 8 government representatives, 2 of which represented agricultural interests. Scientists knowledgeable about the causes of abysmal water quality in Chesapeake Bay are never represented on these committees, nor are economists. The “Blue Ribbon Finance Panel” formed pursuant to Chesapeake Executive Council Directive #03-02 answered the question “So what is the Chesapeake Bay worth?” with the estimate (p. 9) “Perhaps in excess of a trillion dollars to the economist.” No one can claim that the profits of special interests like the poultry or waste-disposal industries are any more than a very small percentage of the value of the Bay to society and to the Commonwealth. When polled, roughly 2/3 of Virginians want improved water quality in the Bay and are willing to pay for it. Yet economists who can make this argument for society and respond when special interests cry about loss of profits caused by more regulations are never included in committees such as you cite.

There is absolutely no scientific disagreement that crops do not benefit from the massive amounts of phosphorus (P) that are disposed when nitrogen-based land application is allowed. In Virginia, soils testing higher than 55 ppm P using the Mehlich 1 extraction procedure contain excessive amounts of P and crops need no additional P to achieve maximum yields. This is clearly stated in the 2006 Mid-Atlantic Nutrient Management Handbook (MAWP 06-02, p. 164) “... the critical level for soil test P for Mehlich 3 is around 30 ppm for Mid-Atlantic soils [A Mehlich 3 value of 30 ppm is equivalent to a Mehlich 1 value of less than 20 ppm]. If the test is below 30 ppm we would expect a profitable increase if we add P. However, if the soil test is above 30 ppm, no yield response is expected.”

Only the “Soil Test P” method of determining the rate of land application of animal waste protects both crop yields and water quality. Any other method sanctions the cheap disposal of the waste, to the economic benefit of special interests, causes unnecessary and unacceptable pollution and does not improve crop yields. The fact that Virginia regulations sanction cheap animal waste disposal to benefit special interests rather than protect water quality is proven by DEQ’s response (Form TH-03, 11/02/05) to my public comments of 06/13/05, as repeated in my 03/22/10 letter to Gov. McDonnell and recently quoted in the June 2010 *Bay Journal*. DEQ defends

use of the P-Index because "... dairy, poultry, swine, and biosolids sectors have all voiced a strong desire to have an option to use the P-index." The reason for this policy is that the "Soil Test P" method would require more land for disposal than is true of the permissive "P-index", making disposal more difficult and requiring supplementary nitrogen fertilization. Then-Sec. Tayloe Murphy stated that the Soil Test P method could not "... accommodate the volumes of animal and human waste generated in the watershed ...". These statements prove beyond all doubt that previous administrations "... value profits of special interest groups ["dairy, poultry, swine, and biosolids sectors"] over that of Chesapeake Bay's water quality."

There is no scientific justification for applying P in excess of the recommended values in "Virginia Nutrient Management Standards and Criteria, Revised 2005." No P application should be permitted if a Mehlich 1 soil test exceeds 55 ppm P and no more than 120 pounds of P₂O₅ should be applied per acre under any circumstances. Agricultural productivity would be unaffected by such a "P-based" regulation and water pollution would be reduced. Reducing pollution by mandating P-based land application of animal waste is far less expensive than any other action the Commonwealth can take to reduce Bay nutrient pollution and impacts the fewest citizens. The Commonwealth should institute a complete ban on the land application of all animal waste by the 2025 EPA deadline. Banning land application would affect only about 10% of farmers, 90% of whom farm profitably without using such an inefficient fertilizer and causing disproportionate pollution. In the interim, by 2017, all land application should be P-based. Failure of the Commonwealth to mandate P-based land application is admission by this administration to voters that, as was true of past administrations, Chesapeake Bay water quality is less important than the profits of special interests, and that the "common wealth" of the Bay is being degraded for the profits of a few.

Yours sincerely,

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cc: Sec. Paylor, DEQ; Sec. Johnson, DCR; Russ Perkinson, DCR; Chuck Fox, EPA; Rep. Rob Wittman; Sen, Richard Stuart; Del. Albert Pollard