Virginia Department of Conservation and Recreation
Public hearing on 4 VAC 5-15-00 et seq.
Proposed Nutrient Management Training and Certification Regulations

June 13, 2005 in Harrisonburg, Virginia

Meeting Officer: David Dowling
Director of Policy, Planning and Budget
Department of Conservation and Recreation

Opening:

Mr. Dowling called the public hearing on the Department's proposed Nutrient Management Training and Certification Regulations to order at the Harrisonburg City Council Chambers and explained that he would be serving as the meeting officer. He welcomed the attendees to the hearing.

Mr. Dowling thanked the City of Harrisonburg for allowing us to use this facility this evening.

Mr. Dowling requested the attendees to briefly introduce themselves.

A list of attendees is attached.

Mr. Dowling also introduced Russ Perkinson, the Nutrient Management Program Manager for DCR's Division of Soil and Water Conservation and Michael R. Fletcher, DCR's Director of Development. He noted that we would be audio taping our meeting and developing a set of minutes of the comments received.

Other DCR staff introduced were Christine Watlington the Policy and Budget Analyst; Stu Wilson, Assistant Director of the Division of Soil and Water Conservation; and David Kindig, Nutrient Management Training and Certification Coordinator.

Mr. Dowling requested everyone to register on the attendance list and to indicate if they wanted to speak. He noted the sign-up lists at the back.

Mr. Dowling remarked that the purpose of the hearing is to receive input from interested citizens on the Department's proposed Nutrient Management Training and Certification Regulations during our 60-day public comment period and that on the back table, outside the door, we do have copies of the regulation, the agency background statement, and an economic impact analysis that the Department of Planning and Budget prepared on the regulation. We have also provided copies of the Virginia Nutrient Management Standards and Criteria.

He noted that the Department used the participatory approach to develop the proposal. The Department formed a Technical Advisory Committee to assist in the development of the proposed regulations. The entire action is necessary to bring the regulations and the attendant documents into compliance as may be necessary with § 62.1-44.17:1.1 of the Code of Virginia and with the requirements set forth in 40 CFR Parts 9, 122, 123, and 412 as published in the Federal Register Volume 68, No. 29, dated February 12, 2003 or as may otherwise be necessary to protect water quality.

Mr. Dowling introduced Mr. Perkinson who provided the following statement.

I would like to summarize the purpose of the proposed program. Nutrient management plans are prepared for the purpose of assisting land owners and operators in the management of the land application of fertilizers, animal manures, sewage sludges and other nutrient sources for agronomic benefits and in way that protect the Commonwealth's ground and surface waters. Nutrient application to land is agronomically necessary in many cases for the economically sustainable production of crops and for other benefits including maintenance of adequate ground cover. However, if applied at excessive rates, at improper times, or if misapplied, nutrients can be carried from the field's surface or move below the plant's root zone in soils and enter ground and surface waters where they become pollutants.

I need to emphasize that these regulations do not require farmers or other nutrient users to have nutrient management plans. However, when state laws, other regulatory programs and incentive programs require nutrient management plans, they have to meet the minimum criteria that DCR will adopt in these training and certification regulations. Examples of state programs that do require nutrient management plans include: Animal Waste VPA permits for farms with 300 or more animal units, Poultry Waste VPA permits for farms with 200 or more animal units and Virginia BMP cost-share recipients for certain practices such as animal waste storage facilities. So, to repeat, these regulations in themselves do not require farmers or other nutrient users to have nutrient management plans and those instances where they are required to have plans will not increase through this action.

The recommended rates of application for specific crops contained in the regulations are based upon Virginia Cooperative Extension, Virginia Tech, and Virginia State University recommendations. For commercial vegetable crops, the regulations adopt the Commercial Vegetable Production Recommendations published jointly by Virginia Tech, the University of Delaware, the University of Maryland, Pennsylvania State University, and Rutgers University.

The Department is proposing the modification of nutrient management plan content and required nutrient management plan procedures to address several issues that have emerged since the regulations were last promulgated in 1995 and early 1996. The proposed modifications include revised criteria capable of reducing nitrogen and

phosphorus loss from land to ground and surface waters as well as other changes based on technological advances.

Modifications to phosphorus management practices are necessary to reduce water quality impacts from the land application of fertilizer, animal manure, sewage sludge, and industrial wastes. There's increased regional and national focus on management of phosphorus to reduce water quality impacts from all land-applied sources of nutrients. When the regulations were first promulgated in the mid 1990s, phosphorus was beginning to emerge as an area of significant concern with increasing scientific understanding.

Both the Virginia Poultry Waste Management Act and promulgated federal confined animal feeding regulations and associated effluent guidelines require Virginia to adopt more stringent requirements for phosphorus management standards more stringent than contained currently in the existing Nutrient Management Training and Certification regulations promulgated in the mid '90s. Other states in the Chesapeake Bay Watershed and the Natural Resources Conservation Service have also adopted more stringent phosphorus management policies.

In developing the proposed regulations, the Department sought to identify phosphorus criteria for nutrient management plans to meet several objectives. The method should: (1) protect water quality by controlling soil phosphorus concentrations or phosphorus loadings, (2) be straightforward and time efficient to apply, (3) produce consistent results when applied by different persons, (4) be relatively easy to understand and convey to farmers and other nutrient users, and (5) have the ability to be reasonably consistent or compatible with nutrient management plan software used by a number of planners in Virginia.

To provide some degree of flexibility, several alternative phosphorus management options is proposed through this action to make available to farmers and planners working with organic nutrient sources. These include: (1) the soil test method based on crop response potential, (2) the environmental threshold method, and (3) the phosphorus index method. If farmers and their planners select the phosphorus index method, two alternative methods are proposed to determine the soil loss input to the phosphorus index.

Amendments in nitrogen application criteria in nutrient management plans are primarily addressed through improved timing of land application of nitrogen-containing materials to better protect ground water from nitrate contamination and subsequent transport to surface waters. If fields are identified as environmentally sensitive in these regulations, by definition, the Department proposes that commercial fertilizer nitrogen be applied in split applied in two or more split applications during the growing season, and that organic nutrient sources be applied within 30 days of crop planting.

The Department also proposes that organic nutrient sources may be applied up to 60 days prior to crop planting on sites that are not environmentally sensitive and have an actively

growing cover crop in place. The Department proposes to exempt from these timing requirements any composted organic nutrient sources having a carbon to nitrogen ratio of at least 25:1 as long as runoff control best management practices are utilized.

Additional changes include, but are not limited to, a revised listing of Virginia soils by management group and productivity group to include those soil series established since the last adoption in mid 1990s, increased expected yields for some crops, the addition of several crops and urban land uses, and addition and modification of several defined terms.

At the conclusion of Mr. Perkinson's remarks, Mr. Dowling noted his hopes that the explanation of our regulations just provided by Mr. Perkinson would address some of the questions the attendees had when they came here this evening. He noted that before receiving testimony, he would like to stress that this is an information-gathering meeting. Everyone wishing to speak will be heard. However, due to the number of individuals present he asked those wishing to speak to limit their comments to about five-minutes and try to address information that others may not have already covered, if possible. If necessary, he noted that he might ask speakers questions concerning their testimony or to request additional information concerning a subject believed to be important to the process in order to help the clarify and properly capture their comments.

Mr. Dowling began the public comment portion of the hearing and requested that those speaking should state their name and whom they represent and if they had an extra copy of their comments, we would be happy to accept it. Remarks by the speakers are as generally follows. Mr. Dowling invited each of the following speakers to the podium.

Mr. Curtis Poe: Good evening. My name is Curtis Poe. I'm the Executive Director of the Harrisonburg Rockingham Regional Sewer Authority and it's my privilege this evening to share some comments on the proposed DCR Nutrient Management Training and Certification Regulations.

I'll first discuss the potential impacts of these regulations on the Harrisonburg Rockingham Regional Sewer Authority. I also serve on the Board of Directors of the Virginia Association of Municipal Wastewater Agencies known by the acronym of VAMWA. In that capacity, I'd like to also offer some comments on the impacts of the proposed regulations on VAMWA's membership.

First, I'd like to discuss how the proposed regulations adversely affects our operations. As proposed, the regulations severely restrict the application of biosolids for several months during the winter. This will impact our operation in a number of ways, including storage problems, cost of the additional storage. Our contract haulers that haul biosolids for us would have problems with the short application window that is available to them in the early springtime when they're allowed back on the field. That window becomes even shorter if they're subject to adverse weather conditions in that very brief period. There are odor issues that will have to be addressed. The potential problems increase significantly with larger

volumes of the biosolids being stored in a very limited space. This is not a good plan for our neighbors. There are traffic issues that must be addressed. It is not a good plan to increase truck traffic through residential areas in the early spring as opposed to the current system which allows that traffic to be spread out throughout the entire year. We're certainly going to see more pre-dawn and after-dusk hauling necessary to schedule within the narrow window that's open to us.

I'd now like to offer some general and specific comments and concerns that have been shared with me during discussions with other VAMWA members. VAMWA, as you know, is a non-profit environmental group of local government entities that own and operate publicly owned treatment works that serve about 95% of Virginia's sewered population. As the Department is probably aware, VAMWA membership includes many leaders in the Chesapeake Bay restoration effort and [any] of the effort of the nutrient levels in our waters. The Department may recall that in '96 and '97 VAMWA was a primary proponent of the Water Quality Improvement Act which has led to tremendous nutrient reductions in the years since its passage. Collectively, VAMWA members have invested far in excess of a hundred million dollars to help create new treatment plants with nutrient removal technology under the Water Quality Improvement Act without any regulatory requirement to do so. At our facility, we spent over five million dollars for that very purpose.

In addition to that, VAMWA members are now being asked to spend an additional one billion, with a b, dollars in treatment plant upgrades for additional nutrient removal. Nitrogen is down 37% in Virginia and phosphorus is down 56%. We know more is needed. Going forward, VAMWA members and their public facilities are part of the solution and they look forward to working with DCR, DEQ and the General Assembly to build upon this success.

Now for some general comments on the proposed regulations. Our first concern is a legal and regulatory one. The General Assembly has assigned the responsibility for developing [substantive], and that's my emphasis, regulations for the biosolids use program to the Virginia Department of Health. DCR has a role to play in the land application program but that role is limited. We are concerned that these regulations go beyond the authority and role of DCR because they impose serious limitations on our members' ability to have biosolids land applied. Our concern is that DCR is overstepping its regulatory authority by moving beyond nutrient management training-- again, my emphasis-- into specifying the substantive requirements for land application. We will provide a legal citation and research on this issue in some formal written comments.

Another major concern of our members is over the science that DCR may be relying on to impose these new restrictions. These proposed regulations, if adopted, would have major and costly impacts on our members. Such rules should only be based on sound science and clear evidentiary support. To date, we've not seen that support. We are aware of only one limited study that DCR has replied upon and apparently the findings in that study are not conclusive regarding whether the proposed changes would actually

reduce the actual load of nitrogen entering ground and surface waters. More scientific support is needed.

Another major concern with the proposed regulations is the estimated economic impact analysis. The Virginia Department of Planning and Budget estimated the economic impact to be half a million dollars per year for all facilities in the state of Virginia. The economic impact on VAMWA members alone is far in excess of half a million dollars per year. In fact, the impact on some individual facilities, including the Sewer Authority that I represent, may well exceed half a million dollars at that facility alone.

Our members are reviewing the proposed regulations and continue to review them and evaluate what impacts those will have on our operations. So far, they've identified four reasons, some of which I've already talked about. These proposed regulations would propose serious difficulties to our operations. They are: (1) limited storage capacities at POTWs for wintertime storage. There're some facilities that have absolutely no room for expansion. At our facility, we have about 30 days of storage capacity. If necessary to increase it to 90 to 120 days we're looking at adding an additional 3½ acres of storage area. Now, while we have the room for that at our site, we certainly don't have the topography that will allow that to be done economically without a tremendous amount of site work and expense just to have an area to store it and that doesn't even address the odor issues and the cover that would be necessary to prevent the material from soaking up rain and snow.

The unavailability and expense of landfills is an option. We've tried to utilize the landfill in Rockingham County for disposal of our biosolids and found that they were unable to take that volume and we know that other localities have the same problem. Also, the use of this material in a landfill is a poor choice for the environment. It's contrary to the principles of environmental stewardship which values reusing and recycling a useful material instead of placing it in a sanitary landfill.

The third issue is even if such storage is available, operational and manpower difficulties posed by condensing these spring application periods to approximately two weeks create a number of problems. This short spring window for applications would mean that contractors, which we utilize, would be subject to increased manpower and crowding and labor shortages trying to get this material out in that very brief window and, again, subject to the weather associated with that.

And then, finally, the difficulty placed upon the farmers in insuring the cover crops would be timely planted to make their fields available on these terms. It's not clear how this issue will impact the farmers and their schedules since the farmers would need to plant a cover crop by November 15th and many farmers may still be harvesting then; this approach may not be feasible. DCR may need to show some flexibility here to accommodate farming interests as well.

In closing, I'd like to thank you for the opportunity to speak today on these proposed regulations. VAMWA has some serious questions about the propriety of the regulations and will submit formal written comments shortly. Thank you.

Mr. Hobey Bauhan: Good evening. I'm Hobey Bauhan with the Virginia Poultry Federation. I appreciate the opportunity to share some thoughts this evening. The Poultry Federation is preparing detailed written comments and so I'll just make a few points this evening and reserve most of our comments for our written document that we'll be submitting before the deadline.

Let me say that the poultry industry is committed to sound environmental practices to protect Virginia's natural resources. Well before there was ever a regulatory program of any kind, Virginia poultry farmers had demonstrated strong commitment to nutrient management and water quality protection. However, poultry farmers are extremely concerned about government regulations that would cause an economic burden upon operations that have narrow profit margins, especially in these times where we have high-energy prices. It's therefore critical that the agency insures that the proposed regulations achieve their stated objectives without imposing an additional burden upon farmers and actually look to incorporate scientific research to reduce the existing burdens.

The Poultry Waste Management Act, House Bill 1207, has already had an substantial economic impact on poultry farmers. There are some aspects of the proposal that would actually help some farmers, but there're other aspects of it that would have a detrimental effect in actually cutting off entirely nutrient applications or litter applications, manure applications, on some fields, so we'd like to ask you to consider making crop removal the upper limit as some states such as Delaware have done. The proposal to reduce the cut-off threshold to 50% in the year 2010, we're extremely concerned about that and are opposed to that proposal. It seems to be arbitrary and was put in late and we just saw it for the first time with this proposal.

But basically this regulation should seek to provide as much flexibility as possible for poultry farmers and farmers in general in nutrient management. I think the [JLARC] Report came out with some recommendations and we opined through that process that farmers really need more flexibility, not less, and so this proposal, I think there are concerns about wintertime spreading and there needs to be as much flexibility as possible for that. There needs to be as much ease of implementation as possible.

We don't want to have, as we saw in the news over on Delmarva Peninsula, a story that says here that both Maryland and Delaware have made changes to their fertilizer regulations but if this goes through in Virginia, it would be the strictest regulations of any state. I don't now if that's true or not, but we don't need to have that here in Virginia. We need to project a positive business climate for our agribusinesses so that we can keep farm land in production and preserve open spaces and maintain a land use which is farming that is far preferable to development when it comes to improving the Chesapeake Bay.

I appreciate the chance to be here. We're going to submit written comments and hopefully you'll really listen to the concerns of farmers. I appreciate it. Thank you.

Mr. C.W. Williams: Mr. Chairman, I'm C.W. Williams, Founder and Chairman of the Biosolids Information Group which consists of attorneys, scientists, medical doctors, even an ex judge and nice ladies and good old boys like myself. We share one common denominator. We are concerned citizens of Virginia. The Biosolids Information Group is aware that the proposed DCR regulation amendments address only the nutrient aspects and training certification of those who may be associated with the disposal of waste pollution in Virginia lands. However, the seriousness of applying pollution to Virginia lands must be dealt with in more detail.

While the Biosolids Information Group recognizes measures taken by DCR in its efforts to put forth a reasonable and accountable regulation which when implemented will assist needed steps towards the reduction of pollution and increase Virginia waterway quality protection, yet it falls short. It falls short to the required protection measures needed. The Biosolids Information Group realizes there are a greater, far-reaching safety impacts than those noted in the Departments' justification process. Whereas a farmer/land owner are asked to give up their free land for sludge biosolids disposal sites, they are not guaranteed the balance nor sufficient nutrients as purported. Steps must be taken to protect the farmer/land owner by requiring a more timely application, thereby offering a more beneficial nutrient source at planting time versus the nutrient loss experienced by three or four months prior [to] planting applications.

Steps must be taken to certify the absence of harmful trace elements and toxic chemicals that may become systemic in human and animal food chain. This should be based on citizen and medical testimonies in Virginia as to harmful effects from sludge land applications, the pollution liability is becoming a public issue. Other states have been successful in suing not only the sludge biosolids generator and the hauler applicator but the landowner. A recent judgment was awarded to a Georgia dairy farmer for 550,000 thousand dollars for the death of his herd due to biosolids pollution that was applied to his land from the town of Augusta, Georgia. He is now suing for millions of dollars for his desiccated land.

Virginia has a history, and this is documented at Virginia Tech, of cattle and other grazing animal deaths due to the excessive and untimely application of biosolids with high nitrogen content. It is also documented that with excessive nitrogen and biosolids there will be an increase in the toxic weed population thereby leading to additional herbicides applications and additional grazing animal deaths. DCR must include information on harmful metals and chemicals in land-applied biosolids when considering the nutrient content. To disregard the chemical reactions and interactions of volatile nutrients with existing sludge chemicals will give a false sense of protection to sludge users and the general public.

The justification of reducing pollution is widely known and accepted. The example of pollution clean-up costs funded by states, private citizens, and corporations now exceeding 15 billion dollars for the Chesapeake Bay should be a prime example that all stakeholders will benefit from pollution reduction. Whereas DCR mentioned algae bloom growth causing oxygen depletion, it is the release of toxin sludge biosolids chemicals that are the primary cause for the ever-increasing dead zones in Virginia waterways.

DCR's proposal amendments given rise to the attention that imported biosolids exceed 58% of the total biosolids land applied in Virginia. All Virginia government agencies must address the lack of authority to control imported sludge quality and disposable practices by these out-of-state companies. The steady increase in sludge imports must be addressed.

It is recommended that DCR provided additional language to incorporate future plan requirement amendments such as stricter regulations provided by legislative, regulatory or incentive programs. The amendment modification process should be less restrictive in order to keep the regulations current and in step with scientific developments. DCR should, at the very least, use the soil test phosphorus method versus a phosphorus index. It is our observations that phosphorus and nitrogen should never be applied at more than crop removal rates, therefore, consistent with the Virginia biosolid use regulations. Furthermore, there should be no distinction between application rates of inorganic or/and organic phosphorus.

The Biosolids Information Group opposes the field storage of sludge biosolids due to the lack of scientific data referenced to the harmful public exposure. There is none. Based on the lack of public exposure data, DCR certification requirements must be of the highest standards in order to protect the health, safety and welfare of Virginians and their environment. The stated impact costs of the Virginia Department of Planning and Budget seems excessive based on other application restrictions. However, the reduction in pollution clean-up costs, the increase in crop production derived from a more timely nutrient availability, the consistency of regulation and application and the equity of all stakeholders provides for a reasonable and sound cause for adoption of the DRC proposed amendments.

In conclusion, DCR must remain diligent in its efforts to protect the citizens of Virginia and their environment. It must be clear that the other issues of public exposure to pollution harm be addressed by these amendments. DCR, at a minimum, should address the future listing of risks associated with the disposal of waste pollutants in Virginia lakes. This listing should be part of the certification training without which the public is left in harm's way and vulnerable. Thank you, Mr. Chairman. Any questions?

Mr. Dale Gardner: Good evening, Mr. Chairman. Dale Gardner, Executive Secretary for Virginia State Dairymen. Before I start, I want to thank Director Maroon and Russ Perkinson for the time they took to sit down just recently and discuss some of the issues.

I appreciate that. We will be providing written comments on the specifics of these proposed regulations in greater detail. Our comments that we will address will focus on the timely approval of plans; lack of adequate, in our opinion, almost non-existent, economic analysis of the proposed regulations on farmers; reduction of the 65% phosphorus saturation level to 50% in 2010; zero application rates on high phosphorus fields; and, the restrictive and arbitrary dates of spreading manure.

My comments I want to make tonight are going to focus on a broader, what I consider a more fundamental problem we have and with all due respect, I'll be direct. You look around this room. We've got some of the best farmers in Virginia sitting here tonight. They know how to produce milk. They know how to produce crops. They know how to produce poultry. They know how to produce cattle. They're excellent farmers and they also have a high interest in protecting the environment and you can tell that by the BMPs that they've implemented on their farms and in a lot of cases, have spent money out of their own pockets, a lot of money.

While too much phosphorus is a problem that we have to address and we all recognize that, the real crisis is a more fundamental crisis and it's an issue of trust. As evidenced by the increasing regulatory environment and restrictive allowances of good farming practices, many in the environmental community, and this is how many producers feel, many in the environmental community and different government entities simply do not trust that farmers have the ability to do the right thing or even have the desire to do the right thing and I think most people in this room would strongly disagree with that.

Conversely, more and more farmers have less trust in our regulatory agencies, particularly DCR might be one again, because they feel like their interests are not even a consideration. Certainly it could be argued there are producers that need to do more; they are some bad actors out there. We recognize that, but it also could be argued there are some in the state agencies that get carried away and want to micromanage and over-regulate and how we address these situations is a topic for another day, but regulating good, responsible producers to the nth degree to punish a few bad actors is counterproductive and simply perpetuates this lack of trust. We've made a lot of progress with voluntary compliance since 1981 when the first plans were written and more than any other state, Virginia has stepped up and done more than most of the states around us, yet our restrictions are more than most other states around us.

Unless a more commonsense and balanced approach is adopted, the real threat exists to turn the clock back on progress we've made in water quality in maybe a decade. Producers when faced with meeting unrealistic, expensive [applicative] regulations and balanced those against economic survival, I'll give you two guesses which one they're going to pick. Profit margins are too slim to accept reduced crop yields and to be forced to purchase more expensive commercial fertilizers. Farmers should not be put into this position to make this choice and it's really not necessary. There has to be a regulatory balance that achieves water quality and at the same time allows farmers to do what they do best and that's farm and hopefully in the process make a profit.

If Secretary Murphy and Director Joe Maroon are here tonight, I would encourage them to do what they say they've intended to do and that's protect land and water resources. It's in the farmer's own interest to protect his land and water that runs through his farm. DCR should provide a commonsense framework that's simple and easy to understand and let the farming decisions rest in the hands of the farmer and his advisors. Micromanagement creates resentment and hurts profitability and in the end, it impedes progress and water quality we all want to achieve.

VSDA has been and will continue to work with DCR to strike that balance that will benefit all interests. In the meantime, we would suggest DCR go back to the drawing board and work with industry in a meaningful way, along with Virginia Tech, to insure any regulatory has scientific merit and come up with a plan that makes sense. Thank you very much.

Mr. Jerald Heatwole: I just want to speak briefly to the economic impact analysis and before I do this, I just want to make a comment. I was invited to attend this meeting and I'm very appreciative of the opportunity to come here to this meeting, but as a dairy farmer and a poultry farmer in Rockingham County, it was extremely difficult to find a copy of this report. Your web site said you could get it online, but I had my wife who is very good at the computer, and we could not get that today. I made to trip to Harrisonburg so I could have a copy of this report to scan before coming tonight. I think in the future, if there's going to be a proposal like this, at least all farmers in the state who have nutrient management plans should be mailed a copy of this so we can review this and come with our comments and we don't have to spend hours of our time trying to find a report, so I just wanted to add that comment.

On the economic impact analysis, it says in the first paragraph that under Executive Order § 2.24007G it requires that such economic impact analysis include, and I won't read all of it, but part of it, the identity of all localities and types of businesses or other entities affected, the projected number of persons and employment positions to be affected, the projected cost of affected to businesses or entities to implement or comply with the regulation and the impact on the use and the value of the private property. The analysis presented below represents the Department of Planning and Budget's best estimate of these economic impacts. I've read this entire report, 18 pages, every word in it, and I was extremely disappointed with this economic impact analysis. At numerous times in here, it refers to studies that are 5 to 15 years of age to pick out whatever data they want to support their case and we all know, ladies and gentlemen, most of this that DCR is now using is not information that's 5 to 15 years old.

Also in this report on page 4, it says that the economic value of 60% improvement in water quality is estimated to have provided annual recreation use benefits to people in the Washington, D.C., Virginia and portions of Maryland ranging from the millions to the billions of dollars. Now, this is the kind of nonsense used in this to support some of their claims. Then, when you come back to page 18, and that's where I was extremely

disappointed, when they have their conclusions, projected impact on employment, and if you don't have copies of this, ladies and gentlemen in the audience, I sure hope you can have copies before you leave. There are 12 times it uses the word likely. There are six times it says it could.

I'll just read one short paragraph. The proposed regulations are likely to impose additional costs on some farming-related businesses and entities. These businesses are likely to incur additional costs in meeting the requirements of this regulation. This, in turn, is likely to increase operating costs and lower the asset values of these businesses. If this is an economic impact study I feel very sorry on how you make any conclusive results out of this.

I'll try to make this brief. In summary, I just want to share what is a likely economic possibility. The state of Virginia has 760 dairy farms. It is highly likely, it's very probable, that 15% of them farms could be forced out of business because of these kinds of regulations over the next five years. That's only 3% a year, 15%. The average dairy farmer in the state of Virginia, the average dairy farm, has a gross income of around 500 thousand dollars. Now, 15% of 760 is about 110 dairy farms. If this forces 110 dairy farms out of business because of additional regulations, the high costs of meeting them regulations, the high cost of building new storage facilities, that is a 55 million dollar economic impact that is not mentioned once in here. It just says it's likely there will be some costs. 55 million. Now, that's just the beginning.

What about the dairy infrastructure in the state that serves the dairy industry. The feed mills have to lay off truck drivers. All the different service entities that service the dairy industry. I'm only looking at dairy farmers. We haven't shared at all the possible economic impact to the poultry farmers, hog farmers and others. Yes, the economic impact to all citizens of the state of Virginia who're involved in live animal production could be in the millions, and, yes, possibly billions. Thank you.

Mr. Phil Loar: My name is Phil Loar. I work for Arlington County's Water Pollution Control Bureau where I've been employed since 1981. Thank you for the opportunity to comment on the proposed Nutrient Management Training and Certification Regulations. I first wish to commend the Department of Conservation and Recreation for working to protect the Chesapeake Bay and its tributaries from pollutants and excessive levels of nutrients. The main task of all publicly owned treatment works in northern Virginia is to do precisely the same thing, that is, to protect the Chesapeake Bay and its tributaries from pollutants and excessive nutrients. A significant portion of the nutrients removed from wastewater are concentrated in biosolids along with organic content and they return to the environment as soil amendments where they belong rather than ending up in landfills.

I would encourage you to use a more inclusive advisory committee where a broad range of interests are represented. The proposed regulations that have the biggest impact on Arlington's biosolids management program are the proposed wintertime application rates. DCR claims that as a result of the regulation localities that land-apply biosolids, and I

quote, "will require additional application land area and more seasonal storage or seasonal landfilling of sludge or other management techniques such as the use of cover crops for an estimated of 500,000 thousand dollars."

First, there's already a short supply of wintertime land application sites available under the existing regulations. It's highly unlikely that additional application land area can be found in Virginia to accommodate the requirements of the proposed regulations. Second, DCR suggests that seasonal storage of biosolids is an option during the winter months. Unfortunately, there simply is no space available in Arlington County to create biosolids storage. To demonstrate the point, consider the challenge presented by the lack of space as it has affected the current construction and upgrades to Arlington's wastewater treatment plant. Arlington is just beginning a series of upgrades to its treatment plant that will take approximate six years and cost 350 million dollars. Because there is no space available to expand, existing tanks are first demolished to make room for a temporary system so more tanks and buildings can be demolished to build a permanent system before the temporary system can then be demolished. Then, the process is repeated again and then the process is repeated again until hopefully the work is eventually completed by 2011. If additional space were available, the work could be completed in approximately half the time with similar savings. To provide lay down space for construction materials and equipment, the County's police canine unit is being evicted from its exercise yard for six years. I share this example only to make two points. One, Arlington has absolutely no space available to store biosolids for one week, let alone three months. No. 1, publicly owned treatment plants do go to a great effort and expense to protect our waterway so you see we really are on the same side trying to accomplish the same thing.

The third option recommended by DCR is to landfill biosolids during winter months. Arlington County has an agreement to landfill its biosolids when it is not possible to use land application. The additional cost to send Arlington's biosolids to the landfill is 30 thousand to 40 thousand dollars per month, greater than our land application costs. When one considers that Arlington produces almost 5% of the biosolids currently land-applied in Virginia and it appears that DCR's estimated 500 thousand dollars annual economic impact, the publicly owned treatment works is too low and should be closer to two million dollars. A direct result of these regulations will be increased demand for landfill capacity for biosolids which in turn will cost tipping fees to increase. This will create a potential economic impact significantly higher than even the two million dollar estimated based on the current fees.

Unfortunately, one of the grand omissions of the DCR study is the fact that sufficient landfill capacity does not exist to accommodate the volume of affected biosolids regardless of economic impact. For most of 2001, Arlington County did landfill its biosolids while implementing equipment and process changes at the wastewater treatment plant. On some days, Arlington's biosolids trucks were stopped at the landfill entrance and not permitted to unload because the landfill's operator's permits includes a quota on the volume of the biosolids they can accept based on the ratio to the total volume of solid

waste that they receive. The County's staff was forced to scramble to find other landfills that could accept the biosolids. Though not all landfills in Virginia have the same requirements, it's evident that landfill capacity for biosolids is limited. You can imagine the public reaction to scores of trucks filled with biosolids roaming Virginia highways in search of landfill space.

The economic impact analysis prepared by the Virginia Department of Planning and Budget states, and I quote, "according to DCR, manure and biosolids are the primary source of excess of phosphorus." Based on information supplied by DCR, the report claims that soil erosion and run-off create high nutrient levels in surface waters. However, no mention is made of the research that indicates soil erosion and run-off is reduced from fields using biosolids due to the higher organic content and physical make-up of land-applied biosolids. It's apparent that the Department of Conservation and Recreation does not regulate biosolids management in Virginia. If it were responsible for biosolids regulations, the Department would have been aware of the impacts on the publicly owned treatment works from these proposed regulations. The state has granted the authority to regulate biosolids to the Virginia Department of Health. These proposed regulations have the net result of expanding the authority of the Department of Conservation and Recreation where it does not exist.

In summary, I respectfully request that the Department of Conservation and Recreation to re-examine its flawed analysis of the potential economic impacts of the proposed regulations. I'll ask the Department to perform a more thorough analysis of the relevant research on erosion and run-off from fields using biosolids instead of using only a handful of studies with tenuous support for its assumptions.

Finally, I request the Department use a more inclusive process with greater representation of interested parties to draft these regulations. We all seek to restore the quality of Virginia's waterways by reducing nutrients that find their way into streams and rivers. We can accomplish this much easier and sooner by collaborating on the issue rather than by ignoring each other's interests. Thank you very much for your time, for your attention. I'll leave a copy of my remarks.

Mr. Anthony Beery: My name is Anthony Beery. I represent Berry Farms, a farmer, a dairy poultry farmer. I'm also a certified planner. I'm not going to mention nutrient management plans. I'll keep my comments simple and brief. One of my big concerns about the nutrient management plans and the revisions thereof, it does not address the complication that is involved with the nutrient management plans. The plans are written in such detail that they are difficult to know if I'm in compliance. I talked to a fellow just the other day; we were talking about nutrient management plans. He says I write down what they want and so my own thing. I would suggest to you that that's a common occurrence, not because he desires to pollute but it's so convoluted and hard to understand that he's not willing to fool with it.

Another issue that I don't think is addressed is you're dealing with a dynamic system where nitrogen leaches away through natural causes even though we may split apply, even though we may use the best of intentions in our management. For instance, the PSNT used in the farm crop at this time of year, it needs to be able to trump the plan if the nitrogen is needed for the corn crop. I would suggest to you that the plans in the way that they were written in such detail leads to enforcement that's also over detailed. For instance, we were cited for a 3.6 pounds of nitrogen overage on 150-pound balance. I would suggest to you that this is ridiculous.

It would be of benefit to DCR to do a few big things well and let the details go. You might lose a pound of nitrogen here and there but you might have a plan that a farmer will actually follow.

Another issue that we face on our farm is costs. The nutrient management plans are not cost effective. We have our own farm scales. We weigh our crops as we harvest them. We saw our yields drop when we started implementing nutrient management plans. Not to mention the increased use of commercial fertilizer which is available right away much more readily going into the environment instead of being used as a manure that mineralizes over time.

Another issue that I don't feel the revisions have addressed is that certified planners don't have enough authority to change plans. There seems to be a need to go through Richmond with every job [until that goes] to a plan and an example on our farm, again, in 2000, when we first got our plan, the following three years we had five plans, sometimes taking six months to be approved. This is unacceptable. I can't wait six months to change a crop rotation.

I see no reason that the certified planner cannot be trusted to change a plan. That's why he's certified. It would seem more appropriate to me that DCR would spot check plans and review plans at the end of the plan. This also leads to a lack of flexibility because of the time constraints in getting approval and changes.

In closing, I met the CBF, the Chesapeake Bay Foundation, earlier this year and they made the comment that they would love to see farming over subdivisions any day. I would suggest to you that the nutrient management plans that the farmers are currently under will not help them reach that goal. In fact, it will help achieve the subdivision, especially here in the Valley with high prices of land. Thank you.

Mr. Gerald Garber: I'd like to address the economic impact part of this and it may seem as if I had discussed this when we discussed the economic impact. I did talk to him today but he was mostly upset because he was trying to find a plan and we never talked about what happened after he saw the plan. I've been trying for some time to get somebody to tell me what the cost is for not complying with the nutrient management plan. I've gotten a lot of different answer. Nobody really wants to put their neck out there and tell me what the cost is for non-compliance with the plan. Not having a plan,

but non-compliance. I can tell you after three years what the cost is for compliance, the penalty for compliance, and I want to make it clear that this is not the cost of applying the waste, not the cost of doing business. This is the cost over and above what I believe is the correct way to run my farm and it's in excess of six figures. That is based on three years of our hauling costs. That's based on the fact that we are now purchasing potash for our ration which is absurd for a dairy farmer. It's based on the fact that with our new fertilizer applications that we've gotten as a result of these soil tests, we're seeing a dramatic drop in our soil tests to the point where quite frankly I'm embarrassed to have a farm that looks like that. Economic impact in excess of a 100 thousand dollars for compliance.

It never really struck me until I had a kid that went to work for me and I always ask anybody why they wanted to work there. It's sort of a stupid question but I always ask that and he said that he wanted to still be able to count to ten because he worked for a metal recycler and once a week somebody lost a finger and I said, well, how is that possible? How do you not get shut down? What's OSHA have to say about this and he said, well, they practically have a parking space and they have concluded the cost of doing business, that it's better to pay the fines and keep operating. It never occurred to me that the cost of doing business by regulation might be greater by complying than noncomplying. That really bothers me to even have to consider that.

I'm not sure how we're going to get the economic realities and the realities in the countryside together. I've heard people from four different state agencies in the field say that 90% of the problem of pollution is caused by 10% of the people, not necessarily 10% of the people that we reach with regulations. About a month ago, I saw a study out in Pennsylvania that said the same thing. 90% of the problem is caused by 10% of the people. Are we addressing the problem? I don't think we are.

Russ, as you well know, my simple math says that I'm bothered by the fact that 500 cows when you have two crop acres per cow is somehow a problem when 10 and 50 cow dairies with four cows per crop acre is not a problem. I'm bothered by the fact that we just want everything to line up so that somebody somewhere is happy. I'm results oriented. I'm not sure we're achieving results.

Now, I do understand that the people in the field for many of the state agencies don't know the political realities in Richmond which some of you probably understand all too well. How we can we get the political realities and the realities of what will and won't work in the field together? How can we do that? How can we do that so we actually at the end of the day we're accomplish something? I'm not interested in shuffling paperwork. I'm not interested in that at all. I'm not interested in plans that I'm in compliance with that don't amount to anything. I'm interested in a net result, a net result, and until we somehow attack the people that all know. Four different state agencies told me they know who the bad actors are, we don't address that. Let's address the problem. I'm willing, if I'm a part of the problem, I'm willing to be part of the solution, but let's go ahead and attack the problem and let's figure out how to get the people in the field that

understand the realities of what can and cannot work and the people in Richmond who understand the unfortunate political realities together and figure out what we can do right. Thank you.

Mr. John McDonald: I'm John McDonald. I'm a farmer from Rockbridge County. I just wanted to make sure we didn't get in too much of a hurry. We just went to phosphorus plans here in the past few years and it seems to me we haven't had time for any results yet to go as far as limiting our application to zero in some fields and also the farms are regulated I think as much as they want and as high as fertilizer is, I've got lots of requests for litter and I could send that out in five tons. I really wouldn't accomplish anything by doing that. Anything to decrease your profits, it's so tight now it's liable to put a lot out of people out of business. That's all I have to say.

Mr. Ian Heatwole: I think my concern with the economic impact was addressed .

Mr. Mac Williams: My name is Mac Williams. I'm a poultry and beef farmer in Chester County. First, I'd like to apologize for farmers giving you the impression that you can hold this meeting the Mayor's Coat Closet. But I'd like to address the fact that phosphorus restrictions are restricting the farmer any more than what we are currently under is causing greater farmland to be put in development which is causing a more severe impact on the environment than a little additional phosphorus or nitrogen. We use poultry and beef manure is 100% organic natural fertilizer. These restrictions would force us to implement more commercial fertilizer which in years past has been documented that the commercial fertilizer production is one of the top 10 sources of air and possibly water pollution as well in the country. That's all I have to say.

Mr. Dowling inquired if anyone else wished to speak. Hearing none he thanked each speaker for their comments. He noted that persons desiring to submit written comments pertaining to this notice and this meeting may do so by mail, by Internet, or by facsimile. Comments should be sent to the Regulatory Coordinator at the Virginia Department of Conservation and Recreation, 203 Governor Street, Suite 302, Richmond, Virginia 23219. Comments also may be emailed to the Regulatory Coordinator at: regcord@dcr.state.va.us. Or comments may be faxed to the Regulatory Coordinator at: (804) 786-6141. All written comments must include the name and address of the commenter and e-mail addresses would be appreciated also, if they're available. In order to be considered, comments must be received by 5:00 PM on July 1, 2005.

Mr. Dowling thanked the audience for attending the meeting and for providing DCR with their views and comments and wished everyone a safe trip home.

The hearing was closed at 9:00 p.m.

ATTENDEES

Curtis Poe, Harrisonburg Rockingham Regional Sewer Authority
Hobey Bauhan, Virginia Poultry Federation
C.W. Williams, Biosolids Information Group
Dale Gardner, Virginia State Dairymen
Jerald Heatwole, dairy and poultry farmer, Rockingham County
Phil Loar, Arlington County Water Pollution Control Bureau
Anthony Beery, Berry Farms
Gerald Garber
John McDonald, farmer, Rockbridge County
Ian Heatwole
Mac Williams, poultry and beef farmer, Chester County

Virginia DCR Staff Present

David Dowling, Director of Policy, Planning and Budget
Russ Perkinson, Nutrient Management Program Manager
Michael R. Fletcher, DCR's Director of Development
Christine Watlington, Policy and Budget Analyst
Stu Wilson, Assistant Director of the Division of Soil and Water Conservation
David Kindig, Nutrient Management Training and Certification Coordinator.