

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

June 6, 2005 in Williamsburg, 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 James City County Council Building C Meeting Room and explained that he would be serving as the meeting officer. He welcomed the attendees to the hearing.

Mr. Dowling thanked James City County 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; Jack Frye, Director of the Division of Soil and Water Conservation; 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 land application of fertilizers, animal manures, sewage sludge, and other nutrient sources for agronomic benefits and for the protection of 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 or surface waters where they become pollutants.

I need to emphasize that these regulations we have proposed do not require farmers or other nutrient users to have nutrient management plans. Now, that's important to take away here. However, when state laws, other regulatory programs and incentive programs require nutrient management plans, they have to meet at a minimum the criteria that DCR will adopt in these training and certification regulations, so let me repeat these regulations we're promulgating do not require farmers or other nutrient users to have nutrient management plans. That's done by other laws and regulations and incentive programs.

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 is increased regional and national focus on the 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 emerging 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 than is contained in the existing Nutrient Management Training and Certification regulations. Other states in the Chesapeake Bay watershed and the Natural Resources Conservation Service or NRCS have also adopted more stringent phosphorus management policies.

In developing the proposed regulations, the Department sought to identify phosphorus criteria for nutrient management plans that meet several objectives. The method should: (1) protect water quality by controlling soil 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 users, and (5) have the ability to be reasonably compatible with nutrient management plan software presently used in Virginia.

To provide some degree of flexibility, there are several alternative phosphorus management options that the Department has proposed 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 have been identified to determine the soil loss input to the 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 water. If fields are identified as “environmentally sensitive” in these regulations, the Department proposes that commercial fertilizer nitrogen be applied in two or more split applications during the growing season, and that organic nutrient sources be applied within 30 days of 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 that have an existing, 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 regulatory adoption, increased expected yields for some crops, the addition of several crops and urban land uses, and the 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. Lynn Gayle: My name is Lynn Gayle, a tomato and grain farmer on the Eastern Shore of Virginia and President of the Accomac County Farm Bureau. I raised so much hell about being last that every time I come to these hearings my comrades thought that I should be first.

Mr. Gayle: Virginia was just recently ranked no. 3 in fresh tomato production in the United States and it's my understanding that the development of the model for this nutrient management plan utilized soil samples sent to Virginia Tech. The majority of the tomatoes produced in the state of Virginia are produced on the Eastern Shore of Virginia and not a single of the major producers send their soil samples to Virginia Tech. They're all sent to private labs and because of that reason, I would hate to be subjected to a nutrient management plan that could adversely affect my operation and not have it based upon information from how we perk our land and where the soil samples go. In closing, I'd like to say that, at the very least, I'd like to see that the limit be crop uptake for phosphorus application. Thank you.

Mr. David Hickman: My name is David Hickman. As a member of the Board of Directors of the Virginia Farm Bureau Federation, I'd like to offer the follow comments on behalf of the 36,000 producers members of our organization. Virginia Farm Bureau membership and staff have worked with the DCR staff and other organizations to develop an equitable, practical and voluntary nutrient management program. However, in recent years the program has been anything but voluntary as one regulation or another requires the development and implementation of the plan. The diminishing voluntary nature of these plans causes our members great concern, especially when they interfere with the proper management of our farms. This is especially evident in regard to the proposed changes in phosphorus management. The proposal sets a threshold for phosphorus saturation at 65% and it also allows the use of the phosphorus index to determine application rates of phosphorus. Both currently cut off phosphorus when soil test levels reach very high

requiring livestock growers and dairymen many [of whom] often do not have the option to transport manure to other farmers.

Additionally, some crops show a positive and economically viable response from phosphorus applications even when soils test very high, particularly potatoes, other vegetable crops that we're familiar with on the Eastern Shore. We believe: (1) that farms with livestock must be allowed to spread manure at a rate no less than crop removal for the expected rotation; (2) all nutrient management plans must allow fertilizer applications above the regulatory thresholds by recruiting them to share the positive economical yield response; and, (3) subsequent diagnostic testing such as tissue testing and pre-plant nitrogen testing should govern the amount and time of additional nutrients necessary to produce an economically viable crop. Crops should not suffer nutrient deficiencies due to limitations of a nutrient management plan.

Rather, a wide variety of factors play a significant role in determining the ultimate rate of nutrients necessary. We don't know in January what's going to happen before June or July when our corn crop might need additional nitrogen. There're so many factors involved it's just unreasonable to think someone's tied to a plan that was developed under hopefully optimum conditions, but we seldom have optimum conditions when we deal with Mother Nature.

The proposed regulations limit applications of manure 30 days prior to planting the intended crop. It's virtually impossible to accomplish application of manure on a farm of any size in this short period of time. This is ultimately going to drive planting dates beyond the optimum time. Additionally, ongoing storage of manure continues to be problematic for all producers of livestock and storage of biosolids by any locations very controversial and logistically difficult not to mention the expense. We certainly haven't had enough cost-share money in Virginia to help offset these manure build-ups.

Therefore, we ask time of applications to be based on field conditions present rather than arbitrarily blocking out months on a calendar. Applications of manure and biosolids should be allowed in the winter months provided there is sufficient cover crop residue or when the ground is not frozen, water saturated or covered with snow. Thirty days is not logistically sufficient to apply manure prior to planting a crop. In no case should there be restrictions of application less than 90 days prior to planting.

Thank you for the opportunity to comment on these regulations. As you can see from this large group of people in agriculture here tonight, the results in these regulations are vital to continued survival of agriculture in Virginia. Thank you.

Leslie Drewer: I'm Leslie Drewer from the Eastern Shore. I've been in agribusiness for 15 years and I just want to bring up some concerns of the farmers that I deal with every day. We understand that nutrient management plans are not mandatory and that we're not talking about a state-enforced regulation on how our farmers farm right now but unfortunately it seems to be far too easy to switch guidelines or parameters of nutrient management plans to

legislation when the time arrives. Like I said, I've been in this for 15 years and I can tell you, voluntarily farmers have cut back phosphorus rates dramatically, I would estimate between 20 and 40% on average just in the 15 years that I've been in the business. Any farmer in this room will tell you they're not anxious to spend more money than they need to in phosphorus or more expensive nutrients.

Also, in the years I've been in the business I've seen plenty of phosphorus deficiency symptoms in crops from corn to vegetables in fields that would be under the current guidelines listed as very high or beyond the saturation levels. It depends not just on the soil tests, but also on climatic conditions and other variables that we are not in control of.

Finally, it's a minor issue but a large component of the no till program has been using liquid fertilizers in conjunction with herbicides, but it's a part of the nutrient production program. Unfortunately, phosphorus is required as a physical ingredient in the clear liquid solution fertilizers in order to hold the potash up. If you don't, your fertilizer solution will silt out and then you will have to decline your nitrogen and your potash separately which is kind of defeating the purpose of trying to prevent soil compaction and best management practices. I do believe in split nutrient application. We've done it for years and it's proven its worth and I'm a huge proponent of best management practices, but I'm concerned about the limitations of a phosphorus-based program should it ever become legislated. Thank you.

Mr. Butch Nottingham: Thank you all. I'm Butch Nottingham with the Virginia Department of Agriculture. I also farm on the Eastern Shore and I've got just a couple of quick comments. I want to deal with some of the comments that you've already received. In the regulatory town hall notice there was a statement by the Chesapeake Bay Foundation that the economic impact on the Chesapeake Bay was 678 billion dollars. I didn't see anything in there about source document or a reference or anything to look up. That's a huge number and I think that if we're going to recognize that kind of number, at the very least, there should be a study or a place where we could go to at least discuss it with someone. I'm not saying it's not a good number, but I think that when you're working in something where we're actually putting people's livelihoods at risk, that we need to be real careful about the numbers that we do use.

I also think that probably [hardly] anybody would disagree that the best nutrient management plans or the best nutrient management resource that we could possibly have is a healthy oyster population in the Bay and I don't think that there's been anywhere near enough research that has been conducted. We've been going on 40-some years trying to replenish the native oyster population and it appears that there is a good opportunity with the Pacific and Asian oyster. I will say that if agriculture that had something that offered the kind of potential that the Asian oyster offers to the health of Bay that we would be in a sweat to get it out so that they could support everything that has supported in the past.

I would also allude to the period in 1930 to 1955 when the phosphorus supply was probably somewhere I'd say 10-fold what it is today. We had a healthy Bay and a healthy oyster

population. I'd like for us to get some bang for our buck and looking to use the marine organisms as [trap] crops as well as best management practices going forward.

Mr. Philip Hickman: Good evening. I'm Philip Hickman, a potato farmer on the Eastern Shore, also representing the Virginia Corn Growers Association. I just want to say that we support Farm Bureau and the Agribusiness Council and their amendment recommendations. Now, as a farmer on the Eastern Shore, I've only been doing it about four years now, but I've been around it all my life and two things, one in particular have become very aware to me. Farmers are not going to spend any more money than they have to. Therefore, they're not going to buy any more fertilizer than they have to and that's where these regulations really get to, because your average homeowner is probably willing to spend extra money on their fertilizer on their yards where a farmer is not. We can't get any more gain than what we're doing by putting excess amount of nitrogen or phosphorus on, so we have no real reason to over-apply whereas a gardener, a home owner, their grass can be greener longer if they apply more nitrogen and I challenge you to go to any suburb in the area and take soil sample and then go to one of our farms and take a soil sample and let me know what [it is] and I'll be pretty sure that ours is a lot closer to being within the nutrient uptake than theirs would be.

And on another part, the more regulations that you're putting on farmers is decreasing farmers' profitability. With rising land values, farmers are going to be more likely with less profits to sell their land and then what do you have? Then you have 10 people or probably at least four families per acre that have the disposable money to spend the money on fertilizer that will leach into the Bay, so just keep that mind when you are writing these regulations. Thank you very much.

Mr. Tony Keen: I didn't realize I was going to get called up so quick either. My name is Tony Keen. I own and operate a consulting firm out of Georgetown Delaware known as Keen Consulting. We do nutrient management plans for agronomic entities and also work towards sports turfs and golf courses and I'm glad to see some superintendents down here. Mr. Perkinson made a comment that Virginia has worked with some other states. We're very involved in the state of Delaware, Maryland and the Eastern Shore of Virginia and also somewhat in New Jersey and I will tell you that Virginia by far has the strictest regulations coming down the pike. I think that they are going to be yield reducers if they are enforced and I would think that if I were in the state of Virginia, I would be concerned of somebody possibly bringing a lawsuit against me for a possible reduction in yield.

I question Mr. Perkinson statement that not everybody was going to be regulated by the nutrient management plan, but it came under another source of law and in the state of Virginia I think that's kind of a catch-22. I don't know what those sources are and I think they ought to be addressed up front, who's going to be regulated by a nutrient management plan and who isn't.

In response to the homeowner, I know that Scott's Fertilizer was a major player in the golf industry up until about five years ago and they have basically pulled out of the golf industry

because they can make more money in selling to home buyers now, so they have pulled completely out of that market and I think that's a real problem source that you all are very very neglective to address. I guess that basically sums up my comments. Thank you.

Mr. Bruce Holland: My name is Bruce Holland. I live and farm in New Church, Virginia, located in Accomac County on the beautiful Eastern Shore. Together with my brother, nephew, son, we farm potatoes, snap beans, field corn, soybeans and raise broilers. Our farm utilizes chicken manure as a source of fertilizer on most of our land. Our fertilization schedule is currently governed by at least the crop removal rate for phosphorus for any given crop that we grow. None of these rates are threatened to be reduced, although currently there is some talk of our phosphorus rates being too high. I suggest it was made with very little input from those involved production of agriculture to reduce these crop removal rates.

What I do not understand is our production still positively responds to this element when this element is added to our soil. If I interpret the proposed regulations correctly, 19% of our land will not need phosphorus in the foreseeable future. This I don't agree with. I have been contracting with private soil consultant firms since 1987 as have many of my fellow growers on the Eastern Shore. Since then we have been able to fine-tune our soil based on our annual soil analysis. Our yields have steadily increased and now our fields have steadily increased in yield and biomass productivity baring no problems beyond our control. This is not to say that our results would be any different had we not dealt with Virginia Tech laboratories. In all probability, they would've been just as good.

The reason we're dealing with a private firm was that we didn't have the time or expertise to collect, load, track and the soil samples maintain a flawless paper trail of results and recommendations about keeping them available and duplicate forms that could be understood by people in our organization. They help us pay attention to details and by doing so, they allowed us to improve our soil profile. By improving our soil profile, we keep elements, both major and minor, for the best use for our crops and livestock. This is an initiative that we took, not a mandate from the state or federal government.

The environment is basically what prompted this whole movement to reduce phosphorus. Phosphorus is an essential element for plant growth. A research technician with Virginia Research and Extension at Franklin, Virginia been working with a phosphorus-based index on our farm three years ago. This along with other available information tells me that the proposed 65% based saturation is completely ignorant of research that has been published and research currently available. In the worse case, we should be able to apply current crop removal rates for phosphorus in our organic or inorganic farming.

Timing of application of manure and biosolids should be based on field conditions and not the calendar. Thirty days prior to planning proposed regulations shows just how out of touch the office of this proposal are with farmers. It is impossible to get manure applied in the 30-day limit. Most farm operations are family run. This means that we do work with the help of a few hired hands if you're fortunate enough to find them. If we were to have

perfect weather, no mechanical breakdowns, no other distractions and no family or public life, this would still be impossible. Applications of manure and biosolids should be allowed in winter months providing there's sufficient crop residue or vegetative cover and the ground is not water saturated or snow covered. Application rates are more on target now than ever before with the advancement in application technology and manure analysis.

Another issue that is overlooked as a contributing factor to phosphorus entering the Bay both directly and indirectly is the large unmanageable populations of waterfowl, mainly resident geese and increasing deer numbers. I haven't seen any statistics that address what they may contribute when they eat the same foods as our livestock and they apply their manure all year no matter if the ground is frozen or if it's 30 days before we plant a crop. Tissue and/or soil testing of the growing crop should supersede limits of the nutrient management plan. When the nutrient management plan was written, it assumed we live in a perfect world. We don't. We don't know when our plan is written if we're going to have a normal spring, wet spring, dry spring or whatever factors that may change our crop. If these post-planning tests show we need additional nutrients to meet our realistic yield goals, then we need the flexibility to apply them in a timely manner. I appreciate the time you've taken to listen to not only what I had to say but also those before and after me.

I would like to leave you with one thought. Don't regulate us out of business. As Secretary Bloxom said, agriculture is not the problem; agriculture is the solution and if agriculture is regulated out of business more houses are built and many more problems are created than exist with agriculture. Don't drive us from what we love to do and what we're very good at. And remember, food comes from the farm, not the grocery store.

Mr. David Long: My name is David Long. I'm a fifth generation farmer on the southern tip of the Eastern Shore. I'm on the Governor's Potato Board and we've actually had this nutrient management phosphorus studies up at the experiment station on the crop of potatoes and it's proved over the last three years that although the phosphorus levels in these soil samples are high, are very high, that we get a tremendous crop response from adding phosphorus as well as nitrogen.

One thing that you want to keep in mind when you're making these regulations and recommendations is the weather. That's one thing that the farmers don't have any control over. This cool spring this year has put most all of our crops about three weeks late. Well, that in itself affects how the plants take up the phosphorus, how they utilize it. You can look at a crop and see that the cold weather in the corn has turned it purple. I don't know whether you all see these things. That's something we don't have any control over.

Certainly, [there] being young farmers, my children and nephews trying to come back and work on the farm, they're facing regulations on all sides. It is really hard for us to maintain and try to talk our children into coming back here and farming when right now we're not going to know whether we'll be able to use fertilizer 10 years from now. They're trying to get poultry brought down in the lower part of Northampton County and the fact of being able to spread poultry litter, it makes it pretty clear that we'll not be able to utilize so that's

one thing that gives the farmer a cash flow. Most crops on the farm we don't have any money coming from when we put our soybeans or get our cotton ginned all the way up until we start cutting our wheat or if we're fortunate to grow a crop of peas in the spring, but we're six months without any money coming in, so an additional operation of poultry would certainly help us.

There're so many homes being built over on the lower shore and these tremendous dollars are added for this farm land, it's a real problem to try to tell your family that we want to keep farming like we've been doing and raising food for this country when you can take the easy step out and get \$50,000 for an acre of land to build a house on. We've worked with this water. We don't spend money on fertilizer when we don't have to. We try to make every penny count and we're not wasteful. There's nobody that knows the land better than we do. We're in it from when the sun comes up until when it goes down and then most of the night we're doing something. We have seen the oysters deplete over on the shore and we're seeing a tremendous comeback right now all over the seaside and in the Bay, working with my brother that raises clams.

We've diversified. We've grown every vegetable, every grain. We're in cotton and what we do is just simple rotation of crops. The soil gets tired out with phosphorus in it and crops can't take it out and you'll see these levels very high and if you can rotate it to another crop, one crop will use another crop's phosphorus, but don't regulate us out of the farming because foreign countries are in this trade agreement right now, they're sending vegetables and grain and poultry, eggs, back into this country and we need to be growing at home and they've told us that the best way we can do is grow more on each acre because our acres are going down and down and the only way we can get the production is by using the nutrients that we need. Thank you very much.

Mr. John Sheehan: Good evening. My name is John Sheehan from the Aqualaw law firm. It's my privilege this evening to share some initial comments on these proposed regulations. This'll be a little bit of a switch from the comments that you've heard so far, coming at it from a different angle here. We are counsel to the Virginia Association of Municipal Wastewater Agencies also known as VAMWA. VAMWA is a non-profit environmental group of local governmental entities that own and operate publicly owned treatment works serving over 95% of Virginia's sewer population. Although the nutrient levels are not a significant concern here in the James River Basin as they are in the Chesapeake Bay, the general topic proposed of these proposed regulations is an important one and VAMWA supports the use of nutrient planning management to protect water quality.

Before turning to the details of these proposed amendments which from an operational perspective will have severe impacts on the operation of these public facilities, I would like to share some very brief background to let you know where VAMWA is coming from with its comments here. As the Department is probably aware, I would emphasize that the VAMWA membership includes many leaders in the Chesapeake Bay restoration effort. The Department may recall that in 1996 and 1997 VAMWA was a primary proponent of the Water Quality Improvement Act which led to a tremendous nutrient reductions in the years

since its passage. Collectively, VAMWA members have invested in excess of 100 million dollars so far in upgrades to their treatment plants with nutrient removal technology under the Water Quality Improvement Act.

Under the Chesapeake Bay Tributary Strategies, VAMWA members will spend another 1 billion dollars to upgrade their facilities. In addition, there're other substantial additional investments in nutrient removal under the Potomac Embankments Policy the Nutrient Enriched Water Policy.

Nitrogen is down 37% in Virginia and phosphorus is down 56%. Going forward, the VAMWA members in 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 and to keep the nutrient reductions going down. Over the past five years, VAMWA has devoted substantial time and resources to the Chesapeake Bay's program to develop and implement water quality based limitations for total nitrogen and total phosphorus and, most notably, just in the past General Assembly, our efforts were significant. Just this past weekend there was an article in the Richmond *Times Dispatch*, an op ed piece published by the EPA touting the legislation that was passed and noting the cooperation between VAMWA and the Chesapeake Bay Foundation.

I'd like to turn to some kind of general comments on the proposed regulations. VAMWA does have some major concerns with these proposed rules. Many of our members [plan to] apply biosolids and will be significantly impacted by this regulation. Our first concern is a legal one. The General Assembly has assigned responsibility for developing substantive regulations for the biosolids use program to the health department

We are concerned with the limitation of or members to apply biosolids. Our concern is that DCR may be overstepping its regulatory authority by moving beyond nutrient management training and moving into substance. We will provide legal citations and research in the form of formal written comments on this issue at the appropriate time.

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, as I've mentioned have, would major impacts and be very costly to our members as obviously to the farm community as well. Such rules can only be adopted based on sound science with clear evidentiary support. To date, we don't think we've seen enough of that support. We are aware of only one limited study which DCR has relied upon and apparently the findings there were not conclusive regarding the proposed changes that would actually reduce the actual load of nitrogen entering the ground and surface waters, so we think 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 impact to be 500,000 per year for all facilities in the state of Virginia. Chris Dawson is here from the South Central Wastewater Authority and he will testify after me about the economic impact

on just his facility's operations and it will be obvious based on his testimony from this one facility that that economic impact analysis is flawed.

Finally, I'd like to just turn to how these proposed regulations will impact our members. Our members are still reviewing these regulations and evaluating the impact. So far, our members have identified four reasons why these proposed regulations would propose serious difficulties. Those four reasons, and I'll list them briefly and then just describe them. First is the limited storage capacities that the publicly-owned treatment works have for winter storage or anytime storage, the unavailability and the expense of land fills as an option. Even if storage were available, there are serious operational and manpower difficulties by condensing the spring application period into such a short timeframe and we also note the ability of farmers to insure that the coverage crops will be timely planted and to make their fields available on the terms that would be required here.

I'm briefly discussing each of these. First, the storage capacity. Many of our members simply have no storage capacity at this point and to build storage capacity for somewhere between 90 and 120 days. Well, first, would be costly. Many of the facilities simply don't have the storage space. They're in more urban areas and simply don't have the space to build additional storage capacity. The space is simply not there. When the space is available, the building of additional storage would take time and the cost would be significant. We would need time to get that storage capacity in those places where we could build it. We question the wisdom of paying to build this additional infrastructure that would only be used for a short time of the year where the environmental benefits are questionable.

The next issue that our members have looked into is the issue of landfills, whether biosolids could go to landfills. A number of problems we think exist with this option. First, though, I think it should be said that we would be taking a productive material that has a useful application and putting it into a landfill and that this would be a poor choice for the environment. This approach is contrary to the principles of environmental stewardship which values reusing and recycling useful materials. Next, the landfill space for biosolids is limited. Our members tell us that their understanding is that the landfills have a limited amount of storage for sewage sludge and it can only be accepted based on a ratio to their solid waste inventory so there's not sort of unlimited capacity for the sewage sludge. Our members have told us that right now the ones that do send their sludge to landfills, oftentimes they're not able to meet the ratios now so if more and more biosolids are going to have to be sent to landfills obviously it's going to be harder and harder to find landfill space. Finally, not only are landfills not an environmentally responsible way to dispose of useful materials, they are extremely expensive as well and this cost would have to be passed on to the rate payers.

The operational impacts of these regulations as currently proposed, the restrictions would mean that there'd be a very short window for applying the biosolids in the spring. This period, as has been mentioned here already, could be shortened by weather factors and other factors. Where facilities are able to store biosolids, getting the biosolids out for application during a short period of time would also create other difficulties. Contractors have told us

they don't have the manpower to do it all so quickly. The amount of truck traffic at that time coming in and out of facilities is also likely to encounter opposition from other types of groups.

Finally, the other issue that our members have noted is the cover crop issue. I've heard some testimony here this evening about how this will impact the farmers but it's not clear at this point how these regulations impact farming schedules and whether they're even feasible given farmers' schedules.

I will submit further additional written comments to really go through the regulations more line by line and we'll give you our thoughts on those. At that time we will also submit some suggested alternatives that we think might be helpful and necessary.

Mr. Sheehan introduced Mr. Dawson, a member of VAMWA, who serves as the Assistant Executive Director of the South Central Wastewater Authority and he can give you a little bit of perspective from one of our members.

Mr. Chris Dawson: Thank you, John. Good evening, Mr. Dowling. My name is Chris Dawson. I'm the Assistant Director of the South Central Wastewater Authority. We are a regional authority much like the Hampton Roads Sanitation District that people here in the Tidewater area know, only we serve Colonial Heights, Petersburg, and the counties of Chesterfield, Dinwiddie and Prince George. We operate a 23 million gallon per day facility. While we're not the largest in the state, we're also not the only one that's going to be affected by these proposed regulations. We are preparing detailed comments to submit to you by the deadline but I did want to briefly discuss some of our comments with you this evening.

The first obviously is cost. Our largest customer is the City of Petersburg which is the fifth most fiscally stressed community in the state. They're struggling right now trying to figure how to pay their share of the 30 million dollars it's going to cost us to reduce nitrogen and phosphorus discharged into the Chesapeake Bay. And then along come these costs of these proposed regulations that are going to increase our costs in two additional ways. First, if you have a phosphorus-based land application rate for biosolids, it's obviously going to increase the acreage that's needed and it's going to increase the travel distance that our contractor is going to have to haul our solids and with the rising cost of fuel, who knows how far those costs are going to increase. We are working with our contractor to try quantify those costs for our comment letter.

Second is the wintertime ban. That's going to require that we pursue one or more of several alternatives. One is new storage. Our consultant of record has estimated that a new storage pad on our site exclusive of the land that we're going to have to buy because we do not have enough land after we allocate what we need for nutrient reduction, it's going to cost 4.2 million dollars. Depending on whether you fund that over a 20- or a 30-year period, that translates into 270 to 330 thousand dollars a year in debt servicing, plus 360 thousand dollars a year that we need to operate the odor control facility because we're located on an

island in the middle of the Appomattox River with South Park Mall on one side and a growing portion of the city of Petersburg on the other.

Another alternative that has been mentioned is landfilling. South Central Wastewater Authority turned away from landfilling to land application several years ago, or approximately 15 years ago, because the nearest landfills did not have an adequate volume of trash to handle the biosolids. The ratio is about 5 times to 1. Well, those landfills aren't taking in any more trash today than they were 15 years ago so they're not going to be able to handle our solids today so we're going to be looking at a significant hauling cost to find a landfill that will be able to handle that. Even the closest landfill's tipping cost would double what our cost would be to dispose of our biosolids during the winter ban.

Another alternative that has been mentioned is incineration. The nearest incinerator to us only has one incinerator so they can't guarantee seven-day-a-week availability of that equipment and if I approach them with a three- to four-month contract, I'm sure they would much rather find somebody that would want them to burn their biosolids on a year-round basis but I certainly can't afford doubling my cost for that option either.

We do have an interest in composting that's growing within Virginia. A gentleman is working on a land application in Sussex County but his cost would also double from what it's currently costing me to dispose of biosolids and like incineration, he would like a year-round contract so that he has a constant source of his material.

Another issue that I think has been overlooked in the economic benefit analysis by the state is family impact. It only mentions a few farm families that might be affected if they didn't have enough land to land apply their manure. That report completely forgets the families that live along the only access road to our plant. As I mentioned, we are on an island. Right now, our contractor spends two to three days per month clearing off our pad and taking the biosolids out through that narrow two-lane residential road. If you give us a two-week window to try to get 90 to 120 days of biosolids off of our site, that's going to be two weeks of constant truck traffic, not conducive to a residential neighborhood.

Thank you for the opportunity to speak this evening and, as I said, we will be submitting more detailed written comments by the close of the comment period.

Mr. Eric Spurlock: Good evening. My name is Eric Spurlock. I'm representing golf course superintendents. I'm a golf course superintendent at Hermitage Country Club just outside of Richmond, Virginia, and I'm representing the Old Dominion Golf Course Superintendents Association as being the president. Typically, golf course superintendents, we're all stewards of the environment. We are very cautious in applying fertilizers as well as pesticides in any application. The end result could be detrimental if misapplied. I understand the reasons that are being made and I agree with them to protect the Bay but they need to be adjusted so that we can all still benefit. The rates and the timing need to be specific to each individual grass and their use and their purpose. As progress is being made to grass varieties we're able to expand the zones in which they are grown. At my golf

course, we have full season roughs on one golf course and equal season fairways on the other golf course. It's all warm season. Being able to adjust those and keep it specific in the roughs cool season or warm season is something that really needs to be looked at.

The rates in the recommendations for the roughs appear to be too low at 0 to 1 pounds of nitrogen per thousand per year. With a rate that low, erosion compaction would also lead to more run-off. Along with that, the fairways need to be increased a bit more, possibly more in line with what the tees are recommended at, at 2 to 5. Construction and renovation of the golf course need a separate set of guidelines to help establish a good stand of turf grass and erosion and run-off control of all fertilizers and nutrients.

I would recommend to get more information from local universities, Virginia Tech Grass Council, talk with the Virginia State Golf Course Superintendents Association and even the United States Golf Association. Thank you.

Mr. Christian Sain: Thank you. I'm Christian Sain. I'm the director of golf course maintenance here at Kingsmill which adjoins the property here. We're a 2,900-acre facility. We have three golf courses. We're run by a large corporation. We are for profit, so like many of the farmers in here, it makes good sense for us to monitor and be very cost sensitive to the amount of nutrients we are applying because it does affect the bottom line at the end of the day from a business standpoint but also from an environment standpoint. I do agree why we're here and what we're trying to accomplish. I concur with Mr. Spurlock on several of his points and there're a few points I'd just like to echo.

Looking at the rates that was recommended, I do believe that the recommended rates for roughs and fairways are on the low sides. The 2 to 5 pound rate that was suggested on tees would be more in line, but in this situation in this area we're growing pretty much Bermuda grass wall to wall where up in different parts of the state, they're growing full season grasses so obviously recommendations can differ. Also, I think that the guidelines does not point out specific grass types that take a lower amount of nitrogen per year versus another grass such as Bermuda grass, so obviously getting these rates correct is very important because if not, obviously it can led to erosion. It can lead to more weeds which is going to lead to whole another basket of issues. It's going to lead to herbicides, so we just need to be cognizant of looking at and trying to make it a little more specific.

The other point was the new construction. It talks about establishment from seeding. Also there's vegetative ways of establishing turf grass that's not addressed in there and golf courses specifically probably needs to be addressed.

The other thing and we've talked a little about the phosphorus and potassium recommendations based on soil tests. I agree with that. It's just the ratios for golf course greens because of modified mixes needs to be looked at and we need to look at research that's based on from universities and other organizations.

Ms. Ellen Davis: Well, we've had a little break from agriculture. My name is Ellen Davis and I'm the Executive Director of the Virginia Corn Growers and Small Grains Association and I also serve as a member of the Board of Directors for the Alliance for the Chesapeake Bay representing that stakeholder group. The two associations that I represent tonight represent hundreds of thousands of acres of agriculture in Virginia and a 1.25 billion part of Virginia's ag economy in the year 2004. We recognize and value the importance of protecting Virginia's waterways but not at the expense of a viable and profitable ag economy.

The poultry industry is one of the major customers of the products we produce. Regulations that increase the cost of poultry production in the Delmarva area threaten the existence of that industry and the very livelihood of grain growers in this area. We're very concerned about what we perceive as the lack of stakeholder input and formulation of these regulations and the lack of clarity about how they will be enforced. We're also concerned that the economic impact studies do not really address the real bottom line dollar impact these regulations will have on agriculture in Virginia. I think we all agree the best way to preserve Virginia's waterways and the integrity of the Chesapeake Bay is to keep land in forest and agriculture. The ag community wants to be a part of this process. They want to work with all parties to develop strategies that are effective, but do not place an undue burden on any one stakeholder. Increased and costly regulations place a great burden on farmers who are competing in a global commodity market where every year we see profit margins shrink and it's been said time and time again I don't think any of us want to see prime Virginia farm land planted in that last crop which is rooftops and asphalt and that's exactly what would be happen.

We urge you to reevaluate these regulations and include the ag community in the formulation of any new regulations as you evaluate the amendments that are proposed. I truly do believe that an open dialogue and conversation benefits all of us, the ag community, Virginia's waterways and the Chesapeake Bay. Thank you.

Mr. Jim Belote: Thank you. I'm the extension agent in Accomac County. I had written a letter to Mr. Dowling with specific comments concerning the proposed regulations and I'd like those comments to be recorded as my comments concerning the regulations and I'll read some of those comments.

First of all, the following comments are in regards to your Department's proposed nutrient management training and certification regulation. One, given the complexity of this regulation, inadequate review time has been given for this new regulation and the timing of the hearings are at the busiest time of the year as related to a farmer's work schedule. That's making it a hardship for a farmer to review and make comments on the proposed regulation. This is the busiest time of the year. Every one of these farmers that are here should probably be home in the field planting soybeans. We're behind now, but they've taken time to come over here and make comments.

Two, the normal process with the adoption of agriculture regulations affecting local farmers has been somewhat bypassed by DCR. Soil and Water Conservation Districts had very little if any notice of the regulations nor adequate time to review them and make comment. Agriculture extension agents with the Virginia Cooperative Extensive Service received no notice about the regulations and an e-mail survey of all local extension offices indicated that only 2% of agriculture extension agents had heard anything about the regulations. I sent an e-mail out to every extension office in the state—we have 105—to all the agriculture agents and most of them had no idea what we were even talking about, so I think it was a big gap there as far as getting information out. Also, I sit on, as associate director right now, the Eastern Shore Soil and Water Conservation District. I was Director for four years up until December and we had very little if any notice in regards to that.

Three, there're questions as to whether the proper field testing of the proposed regulations has been conducted by state technical staff and, as a result, raises questions about the proposed regulations' reliability. I think you'll find that soil testing and a lot of what you had in that document was developed, a lot of it started years ago. It was developed in a soil test can be used on a volunteer basis. It's a guide. It's not a thing that's only got to be this way. Some of it has been taken from other states, particularly in regards to the vegetables for soil testing and I don't think it was meant to be a regulation when we started and it hasn't really gone through the normal processes that it probably should have been if it was known that it was going to be regulatory and not voluntary.

Four, questions have arisen recently about the validity of the Chesapeake Bay computer model. Indications are it is incorrect as related to agriculture because farmers are not being given credit for voluntary BMPs and steps taken to protect the Bay. This in itself raises the questions of whether or not the proposed regulations are even needed. Basically if you took government funds or you were in a government program, you were given credit, but if you were already doing stuff on a voluntary basis, then there's really no baseline number to see what people have been doing on a voluntary basis, so that needs to be looked at. And I think if you do look at that, we've done a preliminary thing on the Eastern Shore you find that on the Eastern Shore we are already in line with the goals of the Chesapeake Bay Program for Reduction of Nitrogen and Phosphorus and probably on the Eastern Shore, it's not even needed, these regulations because of that.

Now, specifically, in regards to your document, wintertime spreading should not be allowed on ground that is frozen and should only be restricted on soils identified as high environmental risk. If identified as high environmental risk soil, there should be an actively growing vegetative cover. Instead of phosphorus applications kept at 0, the cap for application levels should be crop removal for soils be [either] 65% phosphorus saturation levels or soils identified the Phosphorus Index has having an index value of 100 or over, very high.

The 50% phosphorus saturation level for 2010 should be removed. That shouldn't be in there to start with. If you want it, you should come back in 2010 and let's go through this thing again, about the 50%. Substantial research should be conducted and positive

justification established in the agriculture community before it is proposed as a tightening of future regulations in that 50% reduction for 2010.

Nutrient application rates for phosphorus should be based upon the uptake needs of the intended crop instead of the uptake needs of the existing cover crop. Additional applications of nutrients should be able to exceed planned application rates if subsequent analytical data gathered from follow-up field-testing is shown to support the need for the additional application of nutrients. In other words, you put out what you're allowed and you go out and you find out that your crop that is growing later on in the growing season is deficient, say, in phosphorus and if you can prove that it needs additional phosphorus at that time, you should be allowed to do that.

All of us are good stewards of the soil and this should be recognized. While most of the agronomic crop industry uses the soil-testing lab at Virginia Tech, over 90% of soil samples tested for vegetables are done by private labs. The vegetable industry also makes extensive use of crop consultants and in some crops such as tomatoes; the technology was developed and comes from out of state. In regards to the large acreage commercial vegetable industry in the state of Virginia, the state technical people are the staff at the Eastern Shore Research and Extension Education Center at Painter. These factors should be recognized and used in development of any regulations so it should be recognized particularly tomatoes, Mr. Gale said that basically nobody did any soil testing at Tech with the tomato crop. I would say that is true. Most of that technology was developed out of state. The growers on the shore that have been there for years, they actually went to Florida, California, other areas, brought that technology in. We have very little if any on that here in Virginia but it was out-of-state technology that was brought in and it's also that way for some other crops, too.

I think there're about 50 crops in the vegetable recommendation guide. Some of those crops, the soil test recommendations; they have not been tested for years. That guide probably needs to be updated. The position for this that has been responsible over the years is the soil scientist as the Research Station at Painter. Many many years over the last 30 years, there's been nobody there in that position so there's been a very little updating of the soil test recommendation for vegetables here, so there's probably been as much done by crop consultants and people like Tony Kean that talked earlier as there has been done at the Station in regards to that. It's not their fault. It's just they haven't had that type of position in their field to do that for years. They do have a position now, though.

The estimated economic impact section of the document needs to be improved. Information [and knowledge] is lacking on this end. Too many places the analysis leaves out some of the real costs and use of tables and graphs would help the reader in better understanding the direct and indirect costs to the agriculture industry and the administration and implementation of this regulation. I think a lot of work needs to be done on the estimated economic impact statement. It's too many statements in there and five or six different areas there's data not available or we don't know, so you just assume, but we need to do a better job of that I think and we need to put in some tables. You need some kind of summary where a person reading that document can see exactly what the impact is and get a feel for

it rather than rather have to read all the way through that stuff as you do and you're kind of confused when it's over with, I think when you read it, so I think that could be improved on there.

In addition to those comments, I just had a few other additional statements to make and I'll close. I ask that you please recognize the good that agriculture does everybody and try to be positive and appreciative of the industry. I think all of us, particularly in government service, we need to do that. In 1930, we had 175,732 acres of land in Accomac County in agriculture; today we have 91,056 acres. In 1930, we had 66,321 acres of land in woodland in Accomac County; today we have 104,715 acres. In 1930, we had 2,924 farms in Accomac County; today we have 318 farms. My point is agriculture is smaller than it has ever been. It's probably doing less pollution than it has ever been. It's more efficient and unfortunately we have more regulations that we ever had. The environment is safer than it has been for centuries. Trees on the Eastern Shore are replacing farms. Very few young people are going into farming. The industry is moving out of the country. You know, I think really from a national security point, we're probably somewhat at risk today in regards to food product because we've lost so much. Like I said, if you just look at what's happened in Accomac County and basically about 80% of the vegetables in Virginia are grown in Accomac County and that should be alarming to see what has actually happened there.

I guess in closing I'd just like to say we need to keep the documents as probably about as simple as you can keep it. I really think if you just look at the Eastern Shore and what they're doing with regard with regulations, it's probably not even needed. They're already doing their part and I think once they get that computer model straight, I think it will show that, so with that, I'd like to thank you for the opportunity to make these comments and I do have what I gave you in writing.

Ms. Katie Kyger: I'm Katie Kyger representing the Virginia Agribusiness Council and thank you for allowing us this opportunity to speak tonight. The Virginia Agribusiness Council, just for those of you who don't know, represents over 40,000 Virginia farmers, foresters, producers, manufacturers, suppliers, retailers, and associations across the state and over the past few months we've worked within our membership and across the ag industry to formulate some consensus concerns over these regulations and across our membership from our poultry, swine, dairy producers to our soybean row crop farmers, corn, biosolids industry, our turf grass folks, vegetable, potato producers, as you've heard many of them tonight, there're some major concerns that have been raised over and over and over again by the folks here tonight about these regulations and our goal is to look for ways to make these regulations work so that they're economically feasible and so that farmers can continue to produce in ways that will make profits because that's what everybody's out to do. We're all operating a business and at the same time, meet the water quality improvement goals which Russ so accurately stated in the beginning.

Real quickly, because you've heard my points over and over and over again tonight, I just want to make sure that you're clear on where the Agribusiness Council is on this. Phosphorus application rates that are cut off to 0 application are not feasible at all because of

the cost of land prices. Our membership is land bound in many cases, as you've heard from the biosolids industry and from the poultry industry. The increased cost of production to our farmers has an economic impact that trickles down all the way to the corn and soybean producers who supply their feed, and because of this, we ask that the minimum phosphorus application level should be no less than crop removal.

Secondly, the timing of application, nutrient applications, is too stringent. As you've heard, there's some concern about the storage capacity for wintertime applications that would not be allowed under the proposed regulations and although we agree that nutrients should not be applied when the ground is frozen or snow covered, we would suggest removing the 30- and 60-day restrictions and suggest that only for high environmental risk soils must there be an actively growing vegetative cover. Nutrient application rates, as have been said before, should always be based on crop uptakes and viable crop response and because of that we ask that they not be based on existing cover crop but actually on the intended crop to be planted, more reason that the nutrients are put down in the first place.

Secondly, we ask that if subsequent field testing shows through data that additional applications are needed for the plant growth, that that be allowed and the flexibility there be given to the farmer in making those decisions with his nutrient management planner.

You've heard from several folks from the turf grass industry tonight and I'm sure that you've seen some of their public comments be published already, but there's concern from a totally different [sector with] the industry than what you might think about the recommendations for turf grass nutrient applications and we ask that DCR works to update the current recommendations from the past science which is about 10 to 12 years old through collaborations with industry professionals and Virginia Tech to update some of the specific nutrient application levels that have been talked about this evening.

Finally, I'll point out that as many people have, disturbingly for us, the economic impact analysis that was provided is extremely vague and inadequate and we ask that as the Department continues to assess these proposed regulations that they take a good hard look at what the economic impacts are for the industry and as you've heard before, the [least] bio option is to have agriculture land taken out of production and put into a housing development. Ag is the best BMP that we have out there and I don't think any of us would want to see land taken out and put into rooftops and asphalt, as Ellen so adequately stated.

I'm encouraged that conversations are continuing with the Department and the Agribusiness Council. On behalf of our membership, we offer any kind of advice or cooperation that we can give to the Department as they look to make any amendments that they see fit for the recommendations. Thank you.

Mr. Steve Glass: I'm Steve Glass representing the Virginia Turf Grass Council and also I am the Landscape Manager at the University of Richmond. Tonight I want to speak on § 6 Turf Grass Nutrient Recommendations for Homeowners, Office Parks, Public Lands and Other Similar Residential and Commercial Grounds. This point has been made tonight.

The first point I'd like to make is the current recommendations are based on research done in 1993. We are willing to work with the DCR and Virginia Tech to update these recommendations. We spoke with a Virginia Tech representative last Thursday and they are willing to pursue this matter immediately. It may take a while. It certainly can't be done before the end of the comment period, but they're certainly willing to work on this.

The proposed recommendations, many of those we agree with and we want to be good stewards. Some recommendations that have already been mentioned are the fairways 0 and roughs 0 to 1 pound of nitrogen and to the feeling that those are a bit low, but there again, we want that decision to be based on research. In the current recommendations there's very little flexibility built in. There's some flexibility based on the turf usage, but there is less flexibility based on the type of turf grass whether it's a warm season or a cool seasons.

Soils utilized on the sites, for example, in sports turf area, some fields are sand based and some are natural soils. There certainly can be different needs there including geographic locations. If you're looking at Virginia Beach or Blacksburg, there's certainly a variation there that we need to look at and be flexible on and also turf recovery and re-establishment after catastrophic turf loss due to storm damage, pest damage or extreme weather.

The Virginia Turf Grass Council, we're willing to work with the DCR in developing a urban nutrient management plan and training certificate program through our educational program and just to mention, the University of Richmond, I've worked with the DCR and we are a nutrient management site. We certainly want to work with the DCR to the point that we are willing to provide funding for Virginia Tech to perform the research.

As the golf course superintendents mentioned, they are professionals and they are interested in the environment. They want to use the nutrients to promote a healthy dense turf which does act as a filter, but they certainly are under cost restraints and they use what they need to produce the product that they feel like is best, not only for their customers but for the environment. Thank you.

Mr. Matt Hickman: Hi, I'm Matt Hickman. I'm a farmer of potatoes, corn, soybeans and snap beans from northern Accomac County. I recently graduated from Virginia Tech and have come back to work on our farm with my family. I've been directly involved with it all my life and one thing that I've always seen is that it seems farmers tend to get stuck in the middle, a lot of different pressures from regulation, development. There're any number of others. Farm land is, as Katie Kyger said, is the best BMP that you can have. Oils, pesticides, or chemicals, residues are going to wash into the Bay or any other type of surface water a lot easier off a parking lot than they will a corn field and if your real initiative is to protect the Bay and Virginia surface waters, I think that you should be looking to help support those who are trying to do their best to preserve nature as the way it is rather than to force them out of business and possibly creating development which is going to create direct run off into the surface waters. Thank you.

Mr. Beverly Fletcher: I didn't really prepare because I didn't really figure on speaking, but since I've been hearing some of them, I decided I'd say a little something. I guess I'm the oldest farmer in here. I've been farming for over 50 years. I live on Holden's Creek and I have four or five farms that border the Creek and that Creek has been checked ever since the '60s by colleges, the state of Virginia. They're still doing it and for some reason I've never seen any report about what they found, but I from past history I know if it was anything found it'd be on the front page of any paper, so I figured they haven't found anything. This creek goes into the Pokemoke Sound and the Pokemoke Sound goes into the Chesapeake Bay and I live about five miles from the mouth of the Creek because it's crooked, but when I first started farming we were using four times the amount of fertilizer we use now and we planted from hedgerow to hedgerow and now we have buffer zones, filter strips, and we're watching what we're putting on because economically you've got to.

And we're growing more per acre than we did back 50 years ago due to rotation and other things. We're also doing no tilling then. We're no tilling now and so the farmer on the Eastern Shore like some others have said here really, they've already got a nutrient plan because economically they can't put the chemicals and stuff on because they can't afford it.

And another thing, if you pass the plans they've got now, the land will not be farmed in the next 20 years. It'll be in real estate. I mean, what I mean is development because we wouldn't be able to stay in business because we can't afford to buy fertilizers at 250 dollars a ton, so we've got to use chicken manure and other manures for the land, so when you all consider these regulations I think you need to ease off of them and give us some leeway of what that we'd be able to stay in business. If you don't, there won't be no land on the Eastern Shore for the farmer. Thank you.

Ms. Theresa Long: My name is Theresa Long and I'm from the Eastern Shore of Virginia as well. My father is a vegetable farmer there and my family has been in farming for a very long time. My uncle David, as he said, is fifth generation farmer and I'm a sophomore at Virginia Tech majoring in agriculture and it's always been my goal to go back and farm with my dad and I also have five uncles that are farming, including great uncles in Florida and one of my great uncles is actually been regulated out of farming in Florida.

Mr. Andy Ackley: Good evening. I'm with Royster-Clark and I've read Russ's stuff for a few years and I've always found that most of legislation [to be] very well written. I'm also a scientist. I got my Ph.D. at Virginia Tech a few years ago and most of my concern with this ruling is primarily the scientific side and that is in the economic analysis, it states results from the soil studies taken in 1989. My question is shouldn't we be looking at soil results studies from a more recent time period and that long ago when filter strips and borders were not widely used.

I'm in retail. I work for Royster-Clark and it was interesting listening to everybody talk that what this legislation really does is make it next to impossible for growers to use organic manures and since organic manures are one of my biggest competitors, actually this

legislation is good for me, but it's very poor for the growers on the shore, very poor for growers throughout the country. [We need to be] looking at the data, more recent data.

The other things I wanted to mention is we rely on Virginia Tech for a lot of what we need to grow crops, but one of the things I think Virginia Tech has been lacking in and I'm a Hokie, it's hard to say it, but recommendations for soil fertility have always been kind of not up to snuff with some of the other [attribution] that we look at Virginia Tech for. I would ask the DCR that when we look at legislation in the future to not just to look at what Virginia Tech recommends although I understand that that's part of the law, but also look at what some other entities recommend. One of the reasons why we use private labs like A&L and Waters Labs and Spectrum Labs because we find their recommendations to be much more conducive to growing high yielding crops which ultimately put more dollars in our pocket. Virginia Tech recommendations typically tend to be a little bit too on the conservative side and we find that following them oftentimes is not in our best interests. That's all I have to say. Thank you.

Mr. Phil Hickman: My name is Phil Hickman and I represent corn, soybean and small grain producers throughout the Commonwealth. You've heard a lot of technical information tonight about applying fertilizers. I'd like to just take a minute and mention a real success story that's taken place in this region of the country in the last 60 or 70 years. Over the weekend I saw documentary on The History Channel about Frank Perdue. Frank Perdue started his business working out of a pick-up as a farmer approximately 60 or 70 years ago. He built that company into a multimillion dollar company in a very short period of time. He was able to do that because of these people right here. Frank Perdue converted soybean meal and corn into a saleable meat product, a meat product that has been sold throughout the world. I've traveled to the Middle East, I've traveled to Africa, I've traveled to Europe, I've traveled to Russia and other parts of the world promoting U.S. agriculture and every one of those countries I've been Frank Perdue's chickens. Frank Perdue's chickens are fed these folks' soybeans.

These folks make a living, are able to stay in business two ways. They either increase yields or reduce costs. As you heard from Mr. Fletcher here, during his tenure of farming he's reduced his fertilizer costs dramatically so the only way that they can stay in business is to increase yields and I believe and any of these folks here will tell you that the only way that they're going to increase yields is to increase fertilizer inputs on a direct basis. These folks are the best stewards of the land that we have. Without them, they convert the land into rooftops and asphalt as Ms. Ellen Davis said. It's important to keep these people in business to protect their land and to give us a good wholesome food supply. I encourage you all to work together with all the resources that are available at Virginia Tech, the stewards of the land and any other possible sources, associations, to come up with a workable, profitable environmental solution to keep these folks in business to protect the environment. Thank you.

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

Phil Hickman, VDACS
Dick Atkinson, Virginia Soybean Association
Cal Sawyer
Hunter Richardson
Lynn Gayle, Accomack County Farm Bureau
David Hickman, Virginia Farm Bureau
Leslie T. Drewer, Helena Chemical
J. Blaine Sturcut
Theresa M.J. Long, T&S Long Ag. Services
Butch Nottingham, VDACS
Steve Sturgis, Virginia Association of Potato and Vegetable Growers
G. Beverly Fletcher, Green Acres Farm, Oak Hall, Virginia
Phillip Hickman, Dublin Farms, VCGA
J. Andy Ackley, Royster-Clark
Tony Keen, Keen Consulting, Inc
L. Bruce Holland, W.T. Holland and Sons Inc.
David Long, Long Grain & Livestock
Matt Hickman, Dublin Farms
H. Bruce Richardson, Jr., Mill Creek Farms
John Sheehan, VAMWA
Katie Kyger, Virginia Agribusiness
Robert P. Winfrey
Jennifer DeHart, Chesapeake Bay Foundation
Steve Glass, Virginia Turfgrass Council
Jim Belote, Accomac County Extension
Brad Pegram
R.H. Viancour, Colonial Williamsburg Foundation
Cheryl Cashman, Office of Delegate Lynwood Lewis
Chris Dawson, South Central Wastewater Authority
Eric Spurlock, Hermitage County Club
Christian Sain, Kingsmill Golf Course
Ellen Davis, Virginia Corn Growers and Small Grain Association
Theresa Long, Long Grain and Livestock

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
Jack Frye, Director of the Division of Soil and Water Conservation
Stu Wilson, Assistant Director of the Division of Soil and Water Conservation
David Kindig, Nutrient Management Training and Certification Coordinator.