

Supplemental Nutrient Management Questionnaire Transcript

Slide 1: Hello, this is Clint Gill from the Delaware Department of Agriculture Nutrient Management Section. You're all here because, one, you probably want half a credit in this crazy year where it was probably harder to get credits than normal. I'll be explaining our Supplemental Questionnaire for the annual report this year. So, you should receive that, or you already have, with your usual annual report. Right off the top I do want to emphasize that this is for agricultural acres only, these practices don't apply to turf.

Slide 2: So, why are we here? In 2018, an Expert Panel in Nutrient Management for the Chesapeake Bay produced a report that allowed the reporting of more data into the Chesapeake Bay Model. We now have Core Nutrient Management, which is the nutrient management that falls under Delaware's Nutrient Management Law. These are the numbers that we've been reporting for years based on cost-share applications and the Annual Reports that you submit to us every year. However, now we can also submit extra credit for Supplemental Nutrient Management. This means that we can get additional reductions in pollution for both nitrogen and phosphorus practices that relate to rate, placement and timing. An example of a practice that would get credit for a rate reduction would be something like a nitrogen stabilizer. This keeps more of the nitrogen where plants can access it, and in a form that is better for plant nutrition. From the Nutrient Management perspective these nitrogen stabilizers also lead to a slightly lower nitrogen application rate, as a result of less leakage in the system. One practice that would get a placement reduction credit is incorporating manure or litter within twenty-four hours after it's applied to the land. The reduction here comes from getting the nutrients into where they can't be volatilized or washed away by overland flow or denitrified. A big timing improvement that we know happens in the state of Delaware is the split-application, or sidedress of nitrogen on corn.

Slide 3: So, why does this matter? The Chesapeake Bay Model is how the EPA calculates how much nutrient load we have to reduce in our state, as well as telling us what using these practices will accomplish towards our goal. It's not a perfect model, but we spend countless hours in meetings trying to improve the model, as well as advocating for the producers and residents of the state of Delaware. Regardless, the model is what we've got now and for better or worse we have to plan using its outputs. Following years of reporting acres under plans reinforced by the Annual Reports that you submit to us, the details are only sufficient currently to take credit for the Core Nutrient Management. That's the most basic nitrogen and phosphorus reductions for implementing the rates described in the plans. But we do know that there are supplemental practices out there that are being done, that we're not capturing and reporting. We know this just because some of these practices have become fairly standard in our state. These are techniques that are more cost effective and efficient than previous practices. The reason this is so important is because we have potential nutrient reductions that we're just not counting, and as a result we're leaving it off our reporting. We have producers out there that are doing these practices for financial stability, land stewardship or environmental quality, or for all those reasons and maybe some others. But they're not getting the credit in the Bay Model for these activities that they're doing. We really think it's important that the producers of the state get the full credit for the hard work and dedication that they've been putting into their livelihood.

Slide 4: So, why are we doing it this way? You are legally required by our Nutrient Management Law to fill out the annual report that you get every year and return it to the Department of Agriculture. There is

nothing in Nutrient Management Law that legally compels you to fill out and return this questionnaire. We're avoiding any compulsory to fill this questionnaire out and hoping that we get enough by in from the producer community to make this worth everyone's time. We're really unlikely to go to the type of Annual Report where you have five or so pages, but you have information that is really valuable to all of us and we would really appreciate the help. This could reduce the pressure that all of us get from our federal friends. We do think that if we can collect enough of this data, we would be pretty much all the way to our goals for 2025.

Slide 5: So, what happens to my information? What happens to your information is the same as what happens to the Annual Report information that you give us. We take it, enter the information into our secure database, and then later ask the database to synthesize a report based on all the data from that year's questionnaires. We organize it by a given area, which is usually county based, but sometimes by watershed. This report strips out all personal information, so it's safe to share this data with the Bay Program. Delaware State Law considers your data privacy protected because it is proprietary to your operation. This means it can't be given out for a Freedom of Information Act request or any Sunshine Law request. This is your data, it's going to remain your data, and we can't be made to give it out to anyone, short of a unique court order.

Slide 6: So how do I fill it out? This is the supplemental report. This is front side and back side. As you can see the front side is the actual questions, the back side is a glossary of useful terms that might help you be able to fill it out more effectively. Over the next couple slides, I'm going to go over all the questions in this questionnaire.

Slide 7: So, number one is a basic straightforward one. How many acres, broken down into crops. Number 2 is are your fields bordered by a minimum of a ten-foot grass or tree buffer? You should fill this out yes if any of your fields are, I know a lot of you are going to be reporting on many acres on different farms, different field plots. Basically, if you have any grass or tree buffers with a minimum of ten feet, you should check yes on this question. This one is to help us figure out if this is information that is useful to collect, and whether or not we need to be following up on this question. Number three, are there areas on your farm where you are careful not to place fertilizer? This is not a trick question, if you're being careful about where you place fertilizer, we can probably get some credit in the Chesapeake Bay Model for that. It's probably important to point out at this time, that anything you fill out in this questionnaire, we will be asking about it in our inspections that we do from time to time. However, anything you fill out in this particular questionnaire, you cannot be penalized for any answers because this is not legally required. So anything you put in here, you cannot be penalized for it if it's wrong, but in order to get credit we have to follow up with our random inspections to confirm that the practices you claim on here are in fact there. But no penalties for getting any information in this wrong. Nutrient application, number four, do you use, owned by yourself or contracted GPS guided equipment? That one is pretty straightforward. The next question is about variable rate, check all that apply that you use. You've got your standard equipment there and then anything else you might have. How often are soil tests pulled on 100% of your acres. This is something that you might have to ask your consultant about if your consultant pulls these samples. Do your best to fill it out or call your consultant, or call us if you need help with that. And then when you samples are taken and how they're taken, whether they're grid zone or field. Your consultant or you should have some idea of what scale that they're pulled at, just an average condition, for your many acres. And 100% is a best professional judgement thing. We know there might be a couple of fields that maybe you don't do every year. It's 100% or vast majority.

Slide 8: So, question seven, how many acres of irrigated land did you farm? That one is pretty straightforward. And acres of fertigation go along with that. Question eight is a manure question. How do you apply? Do you incorporate? If you test, and how often you test? That's very important for getting credit. And what seasons you typically apply the manure. Number nine is a fertilizer question. All of the time when we're talking about fertilizer in this survey, we're talking about nitrogen and phosphorus. Those are the two nutrients of concern for the Bay. If you're doing potash, that's not really a concern. So, when we refer to fertilizer, we're talking about nitrogen and phosphorus. How do you apply your nitrogen and phosphorus, check all that apply. If you do all of them, check all of them. Do you use starter or preplant, check as many as you need. Then, do you sidedress nitrogen? This is a practice that we really think we're going to get a lot of credit for, because we know most people that are doing corn are sidedressing at this point, just because it's a nitrogen saver. So how do you determine your nitrogen sidedress rate? Use any boxes that apply. Nitrogen modeling is relatively new, but we'd like to capture if that's actually happening. What percentage of nutrients did you apply at that following times? Again, nitrogen and phosphorus for this question and the next one. Just a general breakdown of what percentage of nutrients are applied at what time. Again this is an average condition, best professional judgement kind of question.

Slide 9: Do you apply less than University rates on some of the areas of your fields, yes or no? We can get good credit for that too if you're doing less than university rates. Do you use a Nitrogen Stabilizer? Yes or no, and then what type of stabilizer do you use? Every time you see an asterisk, I should have said this earlier, but every time you see an asterisk in this questionnaire, it refers directly to the glossary on the back and will explain a little bit more about the question or the term. These all have asterisks because we know that you all work in a product name environment, so we used a couple of product names to break down what exactly we're talking about with Nitrogen Stabilizers, Urease Inhibitors, and Nitrification Inhibitors. Question fifteen, how many acres of cover crop did you plant in 2020, that you didn't get cost-share for. We can capture the cost-shared acres that you do, we get that through the conservation districts. But we don't know if you're planting cover crops that you're not getting cost-share money for. That can really get a lot of credit, cover crops is one of our most effective practices to get nitrogen reductions. So, the last question is more of a little open ended, you can write as much or as little as you want. Basically, about changes that you've made that have increased or decreased your nitrogen and phosphorus applications. This is an open ended question so we can get more of an idea of everything that you all are doing, and things that we might want to focus more on in aiding you or having more programming related to the things that you're doing. So, it's a general information question so that hopefully we can be able to serve you a little bit better.

Slide 10: So with that I will thank my colleagues at DDA, I will also thank your consultants who have listened to me do this talk and given some critical feedback on what I should explain more or less. This is my contact information, as well as the contact information for the Delaware Department of Agriculture. Please feel free to call with questions about this, questions about cost-share, questions about anything you might have questions about. If we can't answer it, we can find out who can, and put you in touch with whoever we need to. Also, if you need to reach out to your consultants for some of this information or for some help, we've encouraged them to help out as well. And with that, I will say one last thing. For filling this out, the Delaware Nutrient Management Commission has authorized that you can get a credit and a half for filling out and sending the questionnaire back in. We know that this year has been a little tough for in person events and getting credit. We know that the staff at Extension at

UDel has been very good about getting some online stuff and this will be one of them, but some people are having more trouble than others. So with listening to this, you'll get a half credit, and then another one and a half credits for filling it out, so that's two credits right there, and you'll be on your way. So again, thank you for listening, I hope you'll participate, and we could really use the help. Thank you.