

TAC Meeting, October 9, 2014

TECHNICAL ADVISORY COMMITTEE (TAC) MEETING  
REVISING THE MANUAL FOR EROSION AND SEDIMENT CONTROL

Thursday, October 9, 2014

GA DOT Area 4 Office  
Frank Pinkston Building  
4499 Riverside Drive  
Macon, Georgia 31210

10:00 A.M.

Barbara Hilger, RPR  
Certified Court Reporter, GA A-295

1 TAC Meeting, October 9, 2014  
2 A P P E A R A N C E S  
3 Brent Dykes, Executive Director, Georgia Soil and Water  
Conservation Commission

4  
5 Ben Ruzowicz, Interim Urban Program Manager, Georgia  
Soil and Water Conservation Commission

6  
7  
8 TECHNICAL ADVISORY COMMITTEE MEMBERS PRESENT:

9 Thomas Brown Betty Jean Jordan  
Britt Faucette Bob Moran  
10 Adena Fullard Reece Parker  
Kirby Hamil

11  
12 ADVISERS PRESENT:

13 Glen Behrend Guerry Thomas  
Marc Mastronardi Eric Harris  
14 Dewey Richardson David Eigenberg

15  
16 PUBLIC SPEAKERS:  
17 Representative David Knight  
Representative Penny Houston

18 Brad McCoy  
Donald Davis  
19 Larry Booth  
Kelli Davis  
20 Wayne Seabolt  
Wesley Zech  
21 Michael Perez

22  
23

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2 MR. DYKES: I'm calling to order today the  
3 Technical Advisory Committee Meeting, October the 9th in  
4 Macon. The first order of business, everyone should  
5 have received an agenda upon coming into the room today.  
6 Committee members, are there any changes or additions to  
7 today's agenda as presented to you today?

8 (No response)

9 The consensus is that we move forward on the  
10 existing agenda then?

11 (No response)

12 Okay. We'll do so. I want to say thank you  
13 to Marc Mastronardi and DOT for the opportunity to use  
14 their space here today and hope that it was easy for you  
15 to get to, and I appreciate this opportunity to be here  
16 in the middle part of the state.

17 We do have a court reporter with us again here  
18 today over to my right. Today, as we're going through  
19 comments and discussion, I'm going to ask you, if you  
20 are a committee member, to take your name tent and turn  
21 it like this if you want to speak. This helps the court  
22 reporter know who is doing the speaking and make sure we  
23 get captured all the information that takes place during

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2 the meeting today.

3 As we go through the agenda today, certainly  
4 committee members will be recognized to make any  
5 comments or questions or things of that nature. If it  
6 becomes an issue that we need to reach consensus on,  
7 we'll reach consensus, and I will moderate the meeting  
8 today. Questions and comments from the public will be  
9 taken at the end of the meeting, as addressed on the  
10 agenda as Item Number 6. That's the purpose of today's  
11 meeting.

12 Now, moving on to Item Number 2, the review of  
13 the September 10th Technical Advisory Committee Meeting,  
14 as all of you know, we had a court reporter at that  
15 meeting who provided a transcript of the meeting, and  
16 it's also posted on our Website. At that meeting, just  
17 as a short review, Mr. Joel Sprague presented a finding  
18 that related to the BMP testing that was done with TRI  
19 Environmental and fielded various questions, not only  
20 from the audience but also from the Technical Advisory  
21 Committee members. At that meeting numerous Technical  
22 Advisory Committee members asked for copies of the DVDs  
23 of the tests that were done. That's the stack of CDs

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2 you have before you. There's 77 CDs in each stack that  
3 document each test that was done. I apologize not  
4 having it to you before today, but they arrived, after  
5 having been copied by a third party, yesterday. So I  
6 apologize for not getting them to you sooner but today  
7 is the quickest we could get them to you.

8 At the end of the September 10th meeting we  
9 were presented with a copy of a review of the testing  
10 documents entitled "A Technical Discussion of Industry  
11 Questions and Concerns." That was performed by Dr.  
12 Wesley Zech. That was presented at the end of the  
13 public comment period and you've all been provided with  
14 that prior to today's meeting. That was produced by Dr.  
15 Zech as a third-party consultant for industry  
16 representatives. Dr. Zech was invited to present today  
17 but declined our offer to present: However, he is in  
18 the audience today. I'm sure if you'd like to direct  
19 questions to him, that would be up to his choosing  
20 should he decide to answer those. We appreciate him  
21 being in attendance today. We provided you information  
22 as far as his response to us as far as presenting to you  
23 today, and that information has already been sent to

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2 you.

3 The Technical Advisory Committee received  
4 public comments, of course, at the September 10th  
5 meeting, and those were documented in the transcript,  
6 and they are also in the summary of comments that you  
7 have before you in the binder clip. These were comments  
8 that we received via the Website, through the Green Book  
9 comments address, in addition to questions that were not  
10 answered at last time's meeting back in September.

11 Joel Sprague of TRI was asked to respond to  
12 the comments and discussion provided by Dr. Zech on  
13 behalf of the industry and also to respond to comments  
14 made by Mr. Larry Booth at last month's meeting. So now  
15 I'd like to call Joel up to the table. Joel, if you'll  
16 come up and sit with us, we certainly want to give the  
17 Technical Advisory Committee an opportunity -- I know  
18 you've had a chance to have that document prior to  
19 today's meeting, but I also want to give you an  
20 opportunity to ask questions of Mr. Sprague regarding  
21 his response to the public comments. Joel, I don't know  
22 if you want to make any opening comments or anything  
23 before questions begin, but we certainly want to give

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2 you that opportunity.

3 (Mr. Sprague declined to comment.)

4 So we want to open it up to committee members  
5 and our technical advisers, and we appreciate the DOT  
6 representatives being with us today, to ask questions of  
7 Joel regarding his response to the questions presented  
8 by Dr. Zech and by Mr. Booth.

9 MR. ZECH: Mr. Dykes?

10 MR. DYKES: Yes.

11 MR. ZECH: Am I allowed to ask questions?

12 MR. DYKES: We're going to take questions from  
13 the audience at the end of the meeting. This is the  
14 committee discussion time for committee members and  
15 technical advisers, so we certainly want to give you  
16 ample time to ask Joel questions or express comments at  
17 this time.

18 MS. JORDAN: I have a question. As I was  
19 reading through these comments, several times it said  
20 that they weren't installed according to manufacturer's  
21 directions, but the response each time was this is  
22 according to, I guess, agreed-upon setup for the testing  
23 method. So I just want to make sure I understand that

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2 that is a common occurrence for there to be a difference  
3 between a testing method and a field-installed  
4 procedure.

5 MR. SPRAGUE: In every case the systems were  
6 installed according to really the scope that was set up  
7 by the contract. Some of the systems were to be  
8 installed according to Georgia DOT; some were to be  
9 installed according to the Georgia Soil and Water Green  
10 Book, and one, the compost sock, was to be installed as  
11 directed by the manufacturer of that product. And in  
12 all of those cases we followed those stipulations.

13 MR. MASTRONARDI: So, Joel, is that something  
14 in the RFP?

15 MR. SPRAGUE: Explicitly, yes.

16 MR. MASTRONARDI: So then in the 6th Edition  
17 when it ultimately came out, does it reflect what was  
18 tested in terms of the function of the stake spacing?  
19 The stake spacing, whatever it was, is less than the 6th  
20 Edition now proposes. Are you guys aware of that,  
21 conscious of that? It's an 8-foot test bed, okay?  
22 There's an 8-foot test bed, and in the picture there's  
23 eight stakes. Let's just say they're one foot apart.



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2 The 6th Edition manual shows a compost total size as  
3 having, I want to say, a 4-foot spacing in-between.  
4 We've tested something and then we've established a  
5 standard that isn't what we've tested in.

6 MR. SPRAGUE: It's clearly reported what the  
7 stakes were and how they were spaced and the results.  
8 There is no attempt to make a recommendation to do  
9 anything other than what was tested.

10 MR. MASTRONARDI: I'm not suggesting that you  
11 did. I think for my clarification I did not know, until  
12 I don't know how many minutes have passed since you said  
13 this, that it was at the manufacturer's recommendation.

14 MR. SPRAGUE: Which is how we were instructed  
15 to design it as.

16 MR. FAUCETTE: It's important to realize in  
17 the 6th Edition, the spec for the compost filter socks  
18 is not a propriety spec. It's not a manufacturer's  
19 spec. It's for compost filter socks in general. And so  
20 there was a UPL, unapproved product list, and that has  
21 been taken off the Website. And the way that this  
22 committee discussed it was that as products are tested,  
23 that's how they will be listed on the UPL. And that

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2 doesn't exist anymore because that's been taken down,  
3 but I think what you'll see is, if you go back to that,  
4 the way the folks tested for materials, practices, and  
5 products, that's how it generally made the list. Now,  
6 generally speaking, as a category for compost filter  
7 socks, and there are quite a few companies that do make  
8 this product, there are different spacing requirements,  
9 there are different staking requirements, different  
10 installation requirements. I think the commission tried  
11 to capture that in their specs.

12 MR. MASTRONARDI: If that is so, and I do  
13 understand that it meets a minimum spacing, then it  
14 would seem that we would want --

15 MR. RUZOWICZ: (Inaudible)

16 MR. MASTRONARDI: No, no, no. In the  
17 photographs, not in the drawing.

18 MR. RUZOWICZ: I'm just making sure we are  
19 looking at the same thing. That came out of the 6th  
20 Edition. You said it was nine posts.

21 MR. MASTRONARDI: Right.

22 MR. RUZOWICZ: In the specs there's nine  
23 posts.

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2 MR. MASTRONARDI: So what is the 4-foot  
3 maximum? I think EPD and the GDOT said there was  
4 accuracy with 4-foot spacing.

5 MR. RUZOWICZ: (Inaudible)

6 MR. MASTRONARDI: I still have a question,  
7 though, in terms of, if we are going to have a  
8 manufacturer's recommendation, this is what the  
9 department would do: If we saw items that we thought  
10 were similar or amenable, we would recommend it fall to  
11 that manufacturer's installation as opposed to trying to  
12 generalize the installation. That's a comment that I  
13 want to make.

14 MR. DYKES: Joel, one question was regarding  
15 the A Factor and the calculation of that and how that  
16 did or did not affect the results of the testing you  
17 completed.

18 MR. SPRAGUE: There was an error in that  
19 calculation. It turns out the error -- the result of  
20 the test is to report a ratio. That's what this P  
21 Factor is. So the fact that we made the same error in  
22 both parts of the ratio made it a wash. And the error  
23 was in the calculation using a 40-foot length, which is

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2 what we used in erosion control testing using the same  
3 slopes instead of 27-feet long, which is what is used in  
4 the test method that was employed for these devices. So  
5 that was a very legitimate, well, a clear mistake that  
6 we are fortunate didn't affect the results.

7 MR. BROWN: Joel, based upon the errors that  
8 have occurred I guess in your testing, is it possible  
9 that that can happen with another testing company?

10 MR. SPRAGUE: I guess I would say I would hope  
11 not. Part of the scope of this work was to formalize  
12 the test methods as well and work through the testing  
13 and learn what needed to be learned. This is cutting  
14 edge stuff. This is work that the Georgia Soil and  
15 Water has undertaken that no one else has undertaken.  
16 It's really at the forefront of doing this kind of  
17 testing, so there is a learning curve. Now, with that  
18 said, the mistakes are not in the testing. They are in  
19 the calculations applied to the testing results. So we  
20 are kind of a testing agency, and so in this case to try  
21 and get it to, get that data and put it in a form that  
22 then would be useful to a specifying agency like Georgia  
23 Soil and Water, like the DOT, is to figure out what

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2 these calculations need to do and be. So kind of a  
3 long-winded way of saying the testing and the  
4 methodology which is included in each report should be  
5 very clearly now able to be dispersed to other  
6 laboratories and run effectively without error.

7 The calculation part of this, which is where  
8 the disputes tend to come up because it's the  
9 engineering side of this and each engineer tends to have  
10 their own sense of how to do things. So I would suspect  
11 that because we have embedded to our eyes a sense of  
12 what the calculation should be into this methodology,  
13 that Georgia Soil and Water is kind of saying, yeah,  
14 that's a reasonable way to use the data. And if others  
15 follow that or if others have issues with it, that could  
16 happen too. But that's really where the engineering  
17 judgment side of this comes.

18 There are different judgments to be made, but  
19 hopefully the errors, and there were clearly, and we  
20 tried to be open and report ourselves to Georgia Soil  
21 and Water, there were two calculation errors made. One,  
22 to the best of our understanding, did not affect the  
23 results; the other potentially did. And at some time I

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2 think it would be good to talk about how those  
3 calculations were done, because they are not a part of  
4 the standard itself.

5 MR. DYKES: Joel, I'd ask you, since you  
6 brought it up, go ahead and expand on that if you don't  
7 mind at this time.

8 MR. SPRAGUE: Okay. The part of the  
9 calculations that were in error were in the channel  
10 testing, and it was simply a -- and I don't know how it  
11 happened. When you use these spreadsheets, son-of-a-gun  
12 a formula gets in a cell that shouldn't be there. And  
13 so in working with -- we were told about the error by  
14 Dr. Zech from Auburn, and he assisted us in fixing that  
15 problem. It turned into a result that led us to believe  
16 that a 70-percent reduction in sediment loss from a  
17 channel run through this test method would be a  
18 reasonable cutoff to use in a specification to say this  
19 is a good performing check structure. The original  
20 result said maybe that should be as high as 80 percent.  
21 So this is the part where I'm, now that we know what the  
22 correction is and we've got kind of agreement on what  
23 those calculations put out, I think a meaningful

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2 discussion with the people who will use the results of  
3 this test on what's the appropriate threshold to use for  
4 specification of a good performing check structure would  
5 be a meaningful exercise for the Georgia Soil and Water,  
6 because it's a judgment call.

7 MR. FAUCETTE: I'd like to add onto Joel Joel  
8 said, in that he mentioned that some of this is new and  
9 at the forefront, but I think it's a topic of concern.  
10 The test method we are using is basically ASTM D6459,  
11 more or less, which has -- how long has that been in  
12 effect?

13 MR. SPRAGUE: We've got four different tests  
14 that were done. So there's the toe of slope testing  
15 that is using what is called Test Method 11340, which is  
16 a cousin of an existing erosion control testing  
17 methodology, which is ASTM D6459, and that's where our  
18 facility already was set up to do 6459, and our  
19 expertise. The other one, the channel, ASTM D7208, I  
20 guess the argument stands there as well. It's been  
21 around quite a few years, hasn't been used robustly, so  
22 we didn't have a lot that we could learn from other  
23 people's experience. But both of those test methods

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2 have been around.

3 MR. FAUCETTE: One of my points is I think a  
4 lot of folks think some of this testing is new, and in  
5 fact a lot of it is not. It's been around for quite  
6 some time. And these methods, some of them are actually  
7 many years old and have been used by different groups,  
8 different agencies, using the C Factor as part of D6459  
9 for erosion control products for many years. Now we are  
10 looking at the P Factor, which is just another component  
11 or factor (Inaudible). To me that makes a lot of sense,  
12 because if we are using the standard method that's been  
13 used for many years, could it be adjusted? Could it be  
14 made better? Probably. But we have used the C Factor  
15 for erosion control materials and practices for many  
16 years, and I think it's important that we actually  
17 evaluate our sediment control practices and in much the  
18 same way (Inaudible). So the check dam test is a little  
19 different because it's (Inaudible) used for quite a long  
20 time too, a performance standard, by several groups and  
21 agencies as well.

22 MR. SPRAGUE: Yes. And I do know that 11340,  
23 the toe of slope which provides the P Factor, has also



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2 been used by the Wisconsin Department of Commerce to  
3 evaluate products.

4 MR. MASTRONARDI: Can somebody give me a  
5 chronology? Wasn't 11340 a working test? At what point  
6 was it graduated to an accepted standard test by the  
7 ASTM?

8 MR. SPRAGUE: It is not an ASTM standard,  
9 never been represented as one. It's a Georgia Soil and  
10 Water test method.

11 MR. MASTRONARDI: Okay. But I think I just  
12 heard you say 11340 was, 11340 is --

13 MR. SPRAGUE: It's modeled after ASTM D6459  
14 which tests erosion control products.

15 MR. MASTRONARDI: Right. I've been under the  
16 impression for a couple years it was a working test at  
17 ASTM. Is that right or wrong?

18 MR. SPRAGUE: When you all adopted it, yes.  
19 And I assume it still is.

20 MR. MASTRONARDI: I'm not seeing the WK for it  
21 any longer, so I guess I'm asking you for that  
22 clarification.

23 MR. RUZOWICZ: As far as we know it's still a

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2 working ASTM that 11340 is still in the process of going  
3 through. This was a big debate that the group had when  
4 this first came out, whether we were going to go with  
5 ASTM 7351 or we were going to go with WK 11340. We all  
6 sat there. It's in all the minutes. They all debated  
7 it, and everybody said their piece on it, and it was the  
8 agreement to go with the one that was more real life  
9 with what the group felt as far as the rainfall  
10 simulation to test these products. And that's how they  
11 proceeded to move on.

12 MR. MASTRONARDI: Again, I agree with that.  
13 I'm just trying to understand. So it's still a working  
14 test.

15 MR. SPRAGUE: I believe it is, yes.

16 MR. MASTRONARDI: I just want to be sure for  
17 all of our full understanding it is not an approved ASTM  
18 test. I'm fine that we used it. I'm getting that. I  
19 think it's important to make that clarification for the  
20 record.

21 Being a little bit stubborn, I'd like to go  
22 back to what we were talking about in terms of the check  
23 dam. On that Figure 6-12.4 of the 6th Edition it does

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2 say under Note Number 2: "Place one stake at the center  
3 of the ditch/channel. Also place stakes at the bed/bank  
4 junction and at the end of the device not spaced more  
5 than four feet apart." So pictorially it shows nine out  
6 of ten stakes, but in terms of the narrative -- again,  
7 the broader point still being that if we're going to say  
8 compost filter socks are used universally by many  
9 suppliers and manufacturers, that needs to reflect what  
10 the manufacturers recommend.

11 MR. FAUCETTE: I'm not sure that this drawing  
12 doesn't show a broad spectrum of what these  
13 manufacturers would recommend. Not having done a  
14 survey, I can't say that for sure, but I am very  
15 familiar with the industry and I do think that correctly  
16 represents, that it does say, as Marc pointed out, not  
17 to exceed, so that means there could be more but not  
18 less.

19 MR. MASTRONARDI: And I guess (Inaudible) or  
20 GDOT, you can take from that that, if I had the  
21 opportunity, I may have made suggestions for our check  
22 daming scores, right? Ours also has minimums and  
23 maximums. That's something we did have the advantage of

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2 doing.

3 I don't know if anybody was trying to go along  
4 with this list in order. If not, I do have some  
5 comments regarding the check dam mode.

6 MR. DYKES: Go ahead.

7 MR. MASTRONARDI: On September 10h I was asked  
8 does the installation meet GDOT's details. And I  
9 answered that it didn't, and only from one, from a  
10 cursory review of it, but I've since spent a lot more  
11 time looking at it, and I would share with you that our  
12 details recommend, and you can see in the photographs,  
13 that there be six horizontal wires. The commission is  
14 silent on what the wires should or shouldn't be. The  
15 department is not. We identified a 10-gauge wire in the  
16 top strands, 12.5-gauge wires in the seam, one-foot  
17 spacing horizontally. In the photographs I've seen I  
18 see four wires horizontally. I'll make the rational  
19 conclusion that if the posts are four foot apart, that  
20 you've got 4-foot spacing on the vertical wires. But  
21 that wire support is very important to the success of  
22 that device.

23 In addition, and I can't see from the

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2 photographs but I want to say this: I can't tell  
3 definitively from the photographs but it doesn't appear  
4 that the fence is tied to the top horizontal strand of  
5 the wire backing, which is a requirement of the  
6 department as well. So I would share that.

7 I think the last comment to that is listed on  
8 check dams. Joel, you provided a drawing of how the  
9 detail met in terms of trying to get the 6inch elevation  
10 difference from the end post, but you represented that  
11 to be 25.5 feet in the drawings, or excuse me, in the  
12 pictures that I've seen in terms of, you know, the PDF  
13 presentation that's on the commission's Web page as well  
14 as the final report, those check dam wings are 12-foot  
15 long. So I would say that, again, I don't want to  
16 belabor that point to say that caused a blowout. I'm  
17 not going to make that statement. But to the broad  
18 question of does it meet our installation standard, on  
19 close review I reaffirm it doesn't.

20 MR. SPRAGUE: I disagree. It's -- I disagree  
21 with you.

22 MR. MASTRONARDI: I'm glad to show you where  
23 all this comes from.

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2 MR. RUZOWICZ: How do you feel that the wire,  
3 or the other would make a difference?

4 MR. MASTRONARDI: It's a structural support to  
5 the fence. If you look at some of the pictures, the  
6 fence is sagging. It actually looks in one where it's  
7 inundated that it exactly may have pinched it together.  
8 Here is what I don't know: Would it have made a  
9 substantive difference. I can't say it would or  
10 wouldn't, but it leaves a doubt that it would.

11 MR. SPRAGUE: Marc, this detail, it was  
12 painstakingly put in, and it didn't even come close to  
13 making it through the lowest load. I don't think  
14 there's any way any of those things, which I don't think  
15 occurred -- I mean, we really were painstaking trying to  
16 follow these details as best we could. There's no way  
17 this detail can work. It just can't work. And that's  
18 been interpreted as anti silt fence. It's not. It's  
19 this detail can't work, and that's all we had to work  
20 with.

21 MR. MASTRONARDI: So noted.

22 MR. DYKES: At the last meeting serving as  
23 moderator we had a lot of questions about Bentonite and

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2 the use, that is, matching the test, not matching the  
3 test. Would you talk about some of those issues?

4 MR. SPRAGUE: For TAC members, on the handout  
5 that has the graphs in it, Item Number 7 tries to  
6 capture in summary this issue that went on quite  
7 extensively about the use of Bentonite. It gives some  
8 excerpts from the standard as we were instructed to  
9 follow, and we feel quite confident that we adhered to  
10 the spirit of this, especially the second. It's on Page  
11 4: Place the SRD, that's Sediment Retention Device, so  
12 that no gaps are present along the perimeter barrier and  
13 be cut to fit, as necessary, to cover the width of the  
14 plot. Affix tall products, which in this case indicates  
15 logs and wattles are included in that category, to the  
16 boundary, by tying or adhesive, such that the water  
17 and/or soil cannot escape around the product but has to  
18 go over or through it. Pond sealing foam is suitable  
19 for this task.

20 So our interpretation was that this  
21 methodology intended for the testing agency to assure  
22 that the seepage went through or over the device. And  
23 so we did everything we could on the downstream side to

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2 prevent it from getting down into the soil and coming  
3 through in whatever way, and Bentonite was our pond  
4 sealer of choice. As you know, in Georgia Soil and  
5 Water it's a pretty common pond sealer. So our folks  
6 were allowed to do that when it seemed like there was  
7 any chance of there not being a good, stable downstream  
8 side. I guess that tries to capture -- even with that  
9 said, we went back and evaluated all of the test  
10 methods. If you'll look at Page 5 of the handout, we  
11 evaluated the individual test runs. We happened to have  
12 a situation where -- back up just a step here.

13 Each test includes three replicates, and then  
14 we use the data from all three. It's kind of an  
15 averaging technique. In one of the cases one of the  
16 replicates didn't use any Bentonite and two of them did.  
17 And in your handout, that's the purple diamonds. And  
18 the results were virtually identical. In another case,  
19 what we were told at the last meeting that two fabrics  
20 were identically the same even though they had different  
21 names, when we compared those, it turns out one of those  
22 Bentonite had been used in the runs, and in the other  
23 one it had not been used, and they gave virtually the



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2 same result. And that's what you see to the right side  
3 of the upper figure. We tried to dissect this to see if  
4 the use of Bentonite, even though we feel quite  
5 confident it was in compliance with the standard, would  
6 reasonably be expected to have caused any variance, any  
7 bias, which was one of the, shall we call it,  
8 suggestions at the earlier meeting. And once again, it  
9 does not appear that there's any indication that's the  
10 case.

11 And lastly, we just pulled out every run, just  
12 took off the data from runs that used Bentonite, and  
13 that's what the lower figure shows. And what's left  
14 still produces the same result, the same recommendation  
15 of seepage versus retention envelopes. So I feel like  
16 there's plenty of evidence that the Bentonite use was  
17 totally in compliance, and in being in compliance, it  
18 had no effect, it introduced no bias into the testing.

19 MR. DYKES: Thank you.

20 MR. BROWN: I believe in order to do a correct  
21 test you have to have all of the water and soil to go  
22 through the filter. If you don't close those gaps like  
23 it tells you to, then the test is not worthy. I believe

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2 the Bentonite was fine to use.

3 MR. SPRAGUE: We certainly watched for that,  
4 and so that's what the results on all of the products we  
5 are confident describe, is what happens when all of the  
6 seepage goes through or over.

7 MR. PARKER: I have a question about the ASTM  
8 standard that you read. It says that it requires  
9 Bentonite be used, well, a sealer be used to cover the  
10 width, to affix tall products, logs, wattles to the  
11 boundary by tying or using adhesive. The boundary to me  
12 would be the ends of a sediment barrier, meaning a  
13 sediment barrier is a lot longer than the test. But  
14 does the boundary also include the bottom of the test  
15 bed?

16 MR. SPRAGUE: Our interpretation certainly  
17 indicated that way, especially since the paragraph right  
18 before, the sentence before, indicated that one of the  
19 things to make sure of in the test method is that no  
20 erosion takes place downstream as well, so that all what  
21 we are measuring is what comes through, not what can be  
22 generated on the bottom side. So the combination of no  
23 erosion, seepage having to go through or over, and in

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2 fact we used it on the sides too, so the sides and the  
3 downstream, we interpreted all as the boundary and tried  
4 to force the behavior to be common throughout all the  
5 products tested.

6 MR. PARKER: I thought the Bentonite on the  
7 bottom was used to seal the poly that you had above the  
8 soil to prevent erosion from occurring.

9 MR. SPRAGUE: Absolutely.

10 MR. PARKER: But not to affix the log to the  
11 soil or to the boundary.

12 MR. SPRAGUE: It did the whole thing. Because  
13 that poly on the downstream side, well, and clearly you  
14 can see from the pictures and such it's used on the  
15 sides. We talked about that as well. But I don't think  
16 there was any adverse suggestions related to that. So  
17 that was accepted that we use it there, and on the  
18 downstream side to just seal it all off. And what you  
19 do on these things is try to have as least impact as you  
20 can with having the test run the way it should. And  
21 ultimately what they ended up doing was seeing towards  
22 the latter part of the testing, into July and August,  
23 the need to use more Bentonite to seal things up, and so

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2 they did. And when you look chronologically at how the  
3 testing was done, it was done more towards the end,  
4 which my interpretation is that they ended up starting  
5 to see more higher moisture contents in the toe soils,  
6 and that helped seal it off as well.

7 So it's a tough bargain doing these tests.  
8 It's hard enough doing a little test. When you do a big  
9 one, you're just trying to control as many of these  
10 variables as you can while staying in compliance.  
11 Reasonable questions, though.

12 MR. PARKER: So you're saying that you're  
13 doing this to ensure that the soil and water cannot  
14 escape around the product, and around meaning along the  
15 sides or underneath?

16 MR. SPRAGUE: We are trying to do everywhere,  
17 yes. So we're trying to make the seepage go through and  
18 over. And generally that was not an issue. And so to  
19 try to prevent erosion on the downstream side, Bentonite  
20 is a wonderfully erosion-resistant material.

21 MR. RUZOWICZ: I just want to be clear, when  
22 he says underneath, that you don't mean underneath the  
23 product. You mean from going underneath the fabric, the

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2 material that was placed behind the product; right? Not  
3 the fabric but the plastic or whatever it was behind the  
4 product to stop that.

5 MR. SPRAGUE: We watched to make sure seepage  
6 goes through the product and over the product.

7 MR. PARKER: So it's my understanding Joel is  
8 saying that he wanted to adhere the product to the  
9 bottom, the boundary of the test channel.

10 MR. SPRAGUE: Well, we wanted the installation  
11 technique to speak for itself, if at all possible, but  
12 at the end of the day the method tells us seepage needs  
13 to go through the device or over the device.

14 MS. FULLARD: So you're saying that sealing  
15 all this off, the soil and the storm is pushed through  
16 the product.

17 MR. SPRAGUE: That's right, or over.

18 MS. FULLARD: So the rate of failure would  
19 have been expedited had it undercut. Are we looking for  
20 the failure of the product or the performance of the  
21 product? I think those are two separate issues. So I  
22 think that I'm agreeing with Mr. Brown as well. I think  
23 the Bentonite, we're not looking for failure; we're

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2 looking for how efficient is that product.

3 MR. SPRAGUE: I think our interpretation of  
4 the method was it's looking for the ability to get  
5 performance on these products that can be compared. And  
6 so we try and create the phenomenon, if you will, the  
7 seepage phenomenon like throughout.

8 MS. FULLARD: Right, because if they are  
9 installed correctly, then you shouldn't have flow around  
10 a product or under a product. So honestly I don't think  
11 that's really going to affect a testing method, unless  
12 we're looking for failure to move on to a different  
13 product. So if we're looking for when this product will  
14 fail and undercut or send erosion around the channels,  
15 then we need to reevaluate, but I don't think Bentonite  
16 would be an issue.

17 MR. PARKER: If the product fails, it won't be  
18 able to meet the threshold that we're looking for.

19 MS. FULLARD: Right. But again, are we  
20 looking for the performance or are we looking for  
21 failure? And I don't think those two things are  
22 related. The storm will overtop the product, and at  
23 that point it becomes no longer efficient, but there'll

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2 be some soil, there'll be some loss of soil, loss of  
3 sediment storage in that product, and that's what my  
4 interpretation was of the testing of the compost sock  
5 and the silt fence. Because if it's properly installed  
6 and it's keyed in and you have the toe or if you stake  
7 the compost sock properly, you shouldn't have -- that  
8 should be sealed up anyway.

9 MR. PARKER: How do we know that?

10 MS. FULLARD: In the field?

11 MR. PARKER: I'm just saying the results, it  
12 never (Inaudible) the product.

13 MR. RUZOWICZ: Originally when you guys first  
14 started talking about all this stuff, you guys weren't  
15 necessarily -- I mean, you were looking at products. In  
16 the field not everything is always installed perfectly,  
17 but you guys didn't look at it as during testing they're  
18 all going to be installed correctly and should be able  
19 to have the right water go through them or overtop them.  
20 And you know in the field things happen; people aren't  
21 going to install it a hundred percent.

22 MR. MASTRONARDI: Ben, to your comment and,  
23 Adena, your concern, I think that's the reason it would

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2 be a safety factor in terms of establishing what the P  
3 Factor is, understanding it won't be perfect. But to  
4 speak to that too, again, in Athens there was a lot of  
5 things brought to, I assume, all of our attention we  
6 hadn't previously heard. So in an effort to try to get  
7 up to speed, I went back and looked. In terms of 11340,  
8 I just want to make sure everyone's really conscious of  
9 what we've done in regard to how it fits into the  
10 manual. So for the toe-to-slope tests that we did, it's  
11 on a 33-percent grade. By the commission's manual  
12 anything above a 20-percent grade is to actually have a  
13 10-foot flat area for velocity and energy dissipation.  
14 So we've set a P Factor based on a practice we won't  
15 enforce.

16 I want to be sure we're all conscious of what  
17 we did. Whether that was not artfully discussed or  
18 captured in an effort to adopt the test, it is in effect  
19 what we did. The commission says the distance, the  
20 maximum length of (Inaudible) Sd1 standard by the  
21 commission is a 15-foot line. We have a 27-foot  
22 (Inaudible) line. So again, I'll say this: There is  
23 this need to establish or to use some test method to get



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2 some baseline performance measures established. That's  
3 fine, but we also need to be mindful of what we  
4 currently say and the EPD holds us to in the design  
5 manual. So we got to accept a performance factor we  
6 can't actually attain, and that's a very big point to  
7 consider.

8 MR. RUZOWICZ: When we tested all these  
9 products, we weren't looking to throw any out. We were  
10 looking to test a minimum number so that from whatever  
11 that minimum number was that we got and what the group  
12 decided, we could then say, okay, if you have the latest  
13 and greatest BMP, then you can just meet that number.

14 MR. MASTRONARDI: I understand. Again, let me  
15 shame myself. This got past me. This got past all of  
16 us, or a bunch of us were conscious of it and never  
17 spoke up. Looking at it hindsight after what we  
18 discussed last month and sitting there thinking about  
19 it, in reality we set a standard based on a test. You  
20 can argue it's execution. That's fine. But the  
21 standard in terms of the practical application of what  
22 the State of Georgia mandates, you wouldn't actually  
23 install it that way.

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2 MR. SPRAGUE: I think that's the nature of a  
3 standardized test, though. It's kind of a compromise.

4 MR. MASTRONARDI: But the compromise to me  
5 then, Joel, would be to look at a P Factor that takes  
6 that into consideration.

7 MR. SPRAGUE: You talk about a factor of  
8 safety or something like that, yeah. I'm not sure how  
9 you might assign that, but I understand that portion of  
10 it. But I don't think we're going to ever come up with  
11 a test that --

12 MR. MASTRONARDI: No, but I want to make sure  
13 for the folks at the table and many new faces here in  
14 this committee, and I want everybody to understand that  
15 it's been said two different ways at two different  
16 times. The approach to this was to not replicate what  
17 happens in the field. Reece, you're right. Edena,  
18 you're right. Ben, you're right. Things are not  
19 perfect. So when you set performance standards in the  
20 back of your head, you need to bring it to the front of  
21 your head. It's important to recognize we have actually  
22 gone forward with things that don't actually match what  
23 would be required by the regulation. That's all.

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2 MR. RUZOWICZ: What you're saying is to take  
3 out that 10-foot piece, since when we tested it, it  
4 didn't have that 10-foot piece there, so that it  
5 matches.

6 MR. MASTRONARDI: You can do that but I  
7 think at the same time the department would still use  
8 it. You still have to get equipment down there and  
9 around it to maintain it. If you put a fence that's toe  
10 to slope, you're already some percentage slope, right?  
11 It doesn't take long to fill that fence and run the risk  
12 of overtopping it. Again, a three-to-one slope to put  
13 the fence up immediately adjacent (Inaudible), that's  
14 not a practical, not an application the state would  
15 recognize.

16 MR. FAUCETTE: We actually did talk about this  
17 in the previous Technical Advisory Committee when we  
18 were trying to decide what would be the best and most  
19 appropriate test method. We talked about scale. We  
20 talked about bench-scale testing, index testing, ASTM  
21 testing, very large-scale field testing like the DOT has  
22 done historically. We ultimately decided on this one  
23 for a couple reasons. One is it's a standard test.

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2 It's really hard to duplicate large-scale field testing  
3 on performance information. But the point of the test  
4 was to evaluate performance, not design of these  
5 practices and products. We were trying to do  
6 performance testing to establish a benchmark and then be  
7 able to compare and to evaluate. The purpose of the  
8 test is not to evaluate the design and capacity of  
9 components of these practices, which I think is what  
10 Marc is insinuating. So it would have to be another  
11 test altogether if we're going to look at the design of  
12 each one of these practices and products, looking at  
13 their full slope length and spacing requirements, all  
14 these things. That's not the point of this test. It's  
15 a comparatively performance evaluative test, not a  
16 design capacity test.

17 MR. MASTRONARDI: I don't think I'm  
18 insinuating anything, Bruce, as much as I'm simply  
19 saying you set a performance standard. A performance  
20 standard will govern these issues. So in terms of the  
21 real world enforcement and what the EPD looks at, we set  
22 a number -- I guess what I'm arguing or suggesting is  
23 that number could go north or south of what's been

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2 established. Again, if you have the effect of -- let me  
3 just stop. Let me just say this: I'm not debating  
4 whether or not we're evaluating design, but we as a  
5 state have said this is a performance, minimum  
6 performance measure, what is probably the harshest  
7 scenario to try to get to.

8 MR. PARKER: I think we were trying to  
9 replicate real-world tests as closely as possible, but  
10 you can't have a real-world test. You can get close but  
11 you can't have it. So we followed the standard. I  
12 guess I would want to reevaluate it if this 10-foot  
13 plateau is going to cause a product to not perform. We  
14 established a P Factor based on a test that was not  
15 exactly the same as what the regulation requires, but if  
16 that 10-foot strip is going to be detrimental to the  
17 performance of the product, then I think we should be  
18 looking at it, but I don't think it will. You're saying  
19 it would differ. Yes, it would, but we set a standard.

20 MR. MASTRONARDI: Again, I'm merely trying to  
21 bring to everybody's attention that in terms of  
22 what's -- again, comparing what we do as the test and  
23 what is required, understanding that setting performance

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2 standard -- you know, you could have elected to have  
3 only had a 15-foot area of rain contributing to that.  
4 That's a deviation from the test but it's a working  
5 test. You just said it's Georgia's test. You could  
6 have put anything you wanted in the test. You could  
7 have said a 15-foot contributing area in the test block.  
8 That would give you that scenario. Again, I just want  
9 to bring it up. It's been reinstated as much because  
10 questions have been raised that either were never  
11 considered or maybe we took too lightly. So I'm going  
12 to do my part to bring up the issues that ought to  
13 reflect that.

14 MR. BEHREND: Can you tell me how you  
15 determined the significance? You said there is no  
16 significant difference to the test with or without  
17 (Inaudible).

18 MR. SPRAGUE: That's where I referred you to  
19 these graphs, and it's just a visual comparison. What  
20 you see is the individual data points for each slope  
21 that was tested, and in the test report it's the  
22 cumulative of all three for each product. I think it's  
23 a little bit of both of those looked at together, but

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2 that's the judgment call. And there just really is --  
3 with this little comparative, we happened to luck into  
4 having some runs that we could compare. It wasn't any  
5 kind of designed experiment with and without. So if  
6 I've overstepped my bounds by using insignificant . . .

7 MR. BEHREND: Just to follow up on that, in  
8 the graph below, the seepage SRD system versus P Factor,  
9 if we look at the two Type A silt fence systems, the two  
10 circles that are right on the boundary, is it possible  
11 that the Bentonite or not Bentonite could have affected  
12 those results? They look pretty close.

13 MR. SPRAGUE: The lower ones are all  
14 nonBentonite tests, this lower figure.

15 MR. BEHREND: Okay. I'm just looking for kind  
16 of a sensitivity analysis. You said in the top graph  
17 that they're close, but how do we know whether it made a  
18 difference or not?

19 MR. SPRAGUE: The top graph shows all of the  
20 different slopes broken out. The bottom graph is the  
21 summary of three slopes for the products that did not  
22 use any Bentonite on any of their slope runs. But there  
23 is no statistical basis that this is subplotted and a

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2 judgment made on where do you make a break. Marc's  
3 thoughts about factored safety, perhaps that's what  
4 happens there. These lines are fudged one way or  
5 another based on some judgment on how much factor safety  
6 is applied and such. I certainly see that.

7 MR. RUZOWICZ: Going back to the 10-foot slope  
8 length from the edge of the barriers, in looking at  
9 that, there's a lot of things in the manual that say  
10 shall and there's a lot of things that say should. And  
11 in the manual, the 10-percent, the 10-foot slope length  
12 is a should because we all know that there's  
13 applications where somebody isn't necessarily going to  
14 have the room. You're going to have a slope that's  
15 going to come up to somebody else's property or some  
16 kind of right-of-way issue where you've got to slope it  
17 right to the edge and you're going to have to be right  
18 on that. So that's why the manual says should and not  
19 shall. That way it gives the EPD the ability to use  
20 that at their discretion. So I don't feel that us  
21 putting it at that place would have really made a  
22 difference, being that people would be able to install  
23 it without that 10-foot slope length. Because when you



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2 look at the bottom of Table 6-27.1, there is an asterisk  
3 there next to it and it says, "in areas," and then it  
4 has, "should be provided." And in the beginning of the  
5 manual it gives the different definitions between shall  
6 and should. When we were looking at all this stuff,  
7 there was a lot of times when we were talking about  
8 shoulds and we were talking about shalls and all that  
9 different kind of stuff. I just wanted to bring that to  
10 the attention of the group.

11 MR. PARKER: Could I go back for a little  
12 clarification, Joel, about something you said about the  
13 GDOT check structure installation? Marc was saying it  
14 wasn't installed per GDOT standard. And then you said  
15 it just won't work, the detail just won't work. Could  
16 you clarify what you mean? Do you mean that won't work  
17 in the test area or the detail won't work in the real  
18 world?

19 MR. SPRAGUE: The former. All I can say with  
20 a high level of certainty is that in this test method  
21 with this detail, it's not going to hold up. We really,  
22 really worked hard to get this installed I'm sure better  
23 than it's ever been installed in the field. And we are

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2 required to run the trapezoidal test, trapezoidal  
3 channel, and to meet these requirements where the fence  
4 extends upstream at the top of the side slopes at least  
5 six inches above the top of the fence down in the  
6 channel. So it's got to overtop the fence in the  
7 channel. So the spirit of it really boils down to,  
8 given whatever configuration we have, and that's  
9 dictated by the test method, make that happen. And so  
10 I'm extraordinarily confident we made this section  
11 happen for the test channel we had to work with for the  
12 test method, and in that configuration. Because we ran  
13 it, and then we reran it, and we spent enormous time  
14 making the perfect installation best we could, and it  
15 just didn't hold up. It's some combination of this  
16 detail in this test method that won't work.

17 MR. PARKER: When you say won't work, you mean  
18 will not retain sediment?

19 MR. SPRAGUE: It won't structurally stay  
20 intact, ponding water, for the duration of the .5, the  
21 1, and the 2 CFS.

22 MR. RUZOWICZ: This is just an observation.  
23 Maybe the way that it was installed won't work, but I do

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2 truly think that someday or somewhere there's another  
3 detail or something out there that will get silt fence  
4 as a check dam to pass, and it might even be easier to  
5 install than what is already out there. I think Wesley  
6 Zech already has some studies on that kind of stuff that  
7 show the differences and how they do work better than  
8 others with traditional type geotextile fabrics that  
9 we've seen and we use out there. So I want to say we  
10 are not against silt fence; it's just the specific way  
11 in which it was installed that didn't do the best. And  
12 it might even be easier to install another way.

13 MR. MASTRONARDI: I previously said, Joel,  
14 when you said it couldn't work, I said, "So noted." I  
15 would say your opinion is so noted. What I would argue  
16 is, if our detail shows six wires, separate everything  
17 else out, if our detail shows six horizontal wires and  
18 there's four in place, can you tell me that matches our  
19 installation details?

20 MR. SPRAGUE: I can tell you we used the  
21 materials that we were supposed to use for Type C  
22 installation.

23 MR. MASTRONARDI: And it's possible, Joel,

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2 that you can show me that's what you did. I don't know  
3 what's in the RFP at this point. I can show you details  
4 that existed at the time that the testing was  
5 undertaken that show these things. It's not been  
6 altered in years. So again, to the comment earlier,  
7 where the commission is silent on some details of, say,  
8 Type C silt fence, the department is prescriptive. So  
9 where a Type C silt fence check dam is to be installed,  
10 you can follow our requirements, right? (Inaudible) So  
11 our requirements, inclusive of specifications and the  
12 subset of details, demonstrate what I'm saying. That's  
13 all.

14 I'd also like to touch on the shall/should.  
15 Again, I'm not arguing about you can or can't install it  
16 in the total slope, but again, the principal being just,  
17 as we set performance standards, be mindful of what  
18 we've set. That's all I can say to that.

19 MR. RUZOWICZ: Something else that has come up  
20 a lot was repeatability of the test, and I believe there  
21 was some possible information of submitting it to the  
22 ASTM.

23 MR. SPRAGUE: Specifically the 11340, for

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2 whatever reason, that was brought up as an issue looking  
3 at different steps within the test method and such.

4 That may have meaning to someone but it doesn't mean  
5 anything to a testing lab doing standards. The only way  
6 to evaluate variability in a test is by the results of  
7 the test. And that's precisely what ASTM does with  
8 every single test. It's called establishing precision  
9 and bias. So whatever that conversation was all about,  
10 I believe it doesn't apply to this discussion, but it  
11 did prompt the question. So I sent the data from 11340  
12 from all the control sections to ASTM and asked them to  
13 establish the statistics that are relevant. And they  
14 did provide that. It's on the handout we've been  
15 looking at on Page 6 down at the bottom, the table.

16 So there are a total of 12 control slopes that  
17 were run. The result of a slope run is the amount of  
18 soil loss at the chosen threshold. And the threshold  
19 I'm talking about is a certain R Factor or amount of  
20 rainfall that has been applied, and that's common then  
21 to all of the results on all of the slopes. And so what  
22 you see is the soil loss for five different slope runs  
23 on Slope 1 of our test setup and seven on Slope 2. Once

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2 again, they tell me that the only relevant statistic is  
3 on the test setup, so doing the two slopes together  
4 doesn't count. You're taking each individually to  
5 assess the statistics that relate to how repeatable is  
6 the test.

7 There are two terms related to variability in  
8 ASTM. One's called repeatability. That's can a  
9 laboratory, when it runs the test a second time, a third  
10 time, a fourth time, does it get similar results. And  
11 then there's reproducibility, which is if two different  
12 labs run the test, how close are they. Of course, in  
13 this case only one lab ran the testing so repeatability  
14 is the only statistic that can be generated at this time  
15 on this data that has relevance. The statistics are  
16 statistics we're all quite familiar with, an average,  
17 and a standard deviation, which is a measure of the  
18 variability.

19 And so in the table at the bottom of Page 6  
20 you see the soil loss at the threshold R Factor for each  
21 of the tests, each of the control tests. Then you have  
22 the average of those, and then you have the S small r.  
23 And the way ASTM does things, if there is no other lab,

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2 they report that as their big R, which is the  
3 reproducibility. The little r is the repeatability.  
4 And these are in the same units as the original reported  
5 value. So 20.64 tons per acre soil loss is the average  
6 for Test Slope 1, five runs. The variability, as  
7 described by the standard deviation for those five runs,  
8 is .457 tons per acre. Okay? So what's pretty common  
9 is to use two standard deviations off the average as  
10 roughly 95-percent confidence of minimum versus maximum.  
11 So a lower end confidence means that this test on Slope  
12 1 should be anywhere between 20.64 minus two times .45,  
13 or approximately 19.5 on the low end, up to, you'll do  
14 plus two standard deviations, so roughly 22. So that's  
15 kind of the range of expected results of this test based  
16 on the way ASTM does their statistics related to  
17 variability of testing.

18 And this is really good stuff. For a test of  
19 this size with these kind of variabilities, especially  
20 soil, this is really, really good repeatability. You  
21 can see on Slope 2 it's not as good but it's still very  
22 good. So I think we may be comparing apples and oranges  
23 between what comments were made at the last meeting and

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2 what's being presented here, but as this relates to how  
3 we look at variability on running these standardized  
4 tests, this is the more appropriate way of looking at  
5 it.

6 MR. RUZOWICZ: And this was done by ASTM?

7 MR. SPRAGUE: This was done by ASTM.

8 MR. DYKES: We've had discussion for about one  
9 hour. Certainly don't want to close discussion if there  
10 are questions, so I'm going to keep it open for  
11 questions; if not, we're going to move on.

12 MR. SPRAGUE: If I could, on Page 3 of this  
13 same handout, I thought this was interesting, because  
14 the question came up once again at the last meeting that  
15 somehow we came up with different results for the  
16 properties of products that were supposed to be exactly  
17 the same. And so what we did is we looked at the actual  
18 index tested, the property testing of the index  
19 properties of these materials, and compared them to the  
20 performance results. And so at the top of Page 4 you  
21 see that it's a very small data set. Once again, this  
22 wasn't an experiment we could design but we had to use  
23 the data available to us. It must be that silt fence



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2 materials that are made with the same formula, if you  
3 will, the same design of the fabric, if they are made at  
4 different times they can have different results.

5 Because there's a wonderful correlation between the  
6 performance and what we measured on these materials that  
7 does reflect that I believe what was out there, it may  
8 have had the same name but it wasn't exactly the same  
9 product from a property standpoint.

10 I think that's kind of an important  
11 reinforcement for why this program is so important, is  
12 there are a lot of different materials out there. But  
13 if these performance tests can differentiate between  
14 them, what's actually being used, what actually is  
15 coming off the loom, coming off the production line,  
16 whatever it may be that can differentiate them based on  
17 how they really will work, I think that's a wonderful  
18 tool. It's not just another piece of something that  
19 looks the same to everybody.

20 MR. FAUCETTE: Joel, there was some question  
21 about how the P Factor was calculated in relation to the  
22 other factors within the design equation. Can you speak  
23 to that and how you did that and how ASTM does that?

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2 MR. SPRAGUE: We followed the procedures  
3 except for the error in the length that we have followed  
4 for years for the same methodology used in erosion  
5 control testing, the standard, 6459. And really the  
6 beauty of this test is that the results are a ratio. So  
7 as long as you make the same assumptions for the control  
8 as you do for the protected, they tend to wash out.  
9 It's almost as simple as this. We measure how much soil  
10 comes off. We measure that. It's not changing. It's  
11 not calculated. It's a measured number. And ultimately  
12 the P Factor is the ratio of the soil that comes off a  
13 control, soil that comes off of a protected slope,  
14 divided by the soil that comes off of a control slope.  
15 There's no fancy calculation, but to convert it to this  
16 thing called a P Factor so it can fit into the design  
17 equation, we manipulate it. But that ratio you can't  
18 screw up. And that's really what we've got here. If  
19 Wes and I disagree on what the R should be, or Wes LS I  
20 disagree on what the LS should be by .03, it doesn't  
21 matter. We are ultimately ratioing the amount of soil  
22 that came off of the two. And that's what this is.  
23 That's why, when I commented further, it doesn't change

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2 things when we get into this engineering judgment thing,  
3 if that answers your question.

4 MR. DYKES: Before we move to the next agenda  
5 item I want to make sure committee members or advisers  
6 have asked the questions they'd like to ask of Joel  
7 before we move to the next item.

8 (No response)

9 Seeing none, Joel, appreciate your coming and  
10 sitting with us at the table today.

11 We'll now move to Item 4 on our agenda:  
12 Consideration and discussion of the need for third-party  
13 review of the BMP testing that's been conducted. We had  
14 some discussion certainly at our September 10th meeting.  
15 Certainly we've had discussion today, October 9th,  
16 today's date, about the testing procedures, practices,  
17 processes we went through, the calculations, and all the  
18 details, I think. And we've had comments from folks  
19 related to the industry. We've had comments from our  
20 testing, the person that's under testing contract with  
21 the commission through a state bid process.

22 So my question to the technical committee and  
23 the advisers is: Based on the information that you

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2 received today and prior to today and consideration that  
3 you've made, do you feel as though it's a wise use of  
4 time and resources at the commission to contract with a  
5 third-party scientific review entity that has no prior  
6 knowledge of what we're doing here, has no ties with  
7 what we've done, to review the testing that has been  
8 done, review the comments that we received, and make  
9 comments as to the validity of the process that we've  
10 gone through.

11 We've ventured to seek those type of  
12 third-party reviewers, and we've had a couple of  
13 responses. We're not prepared at the commission to  
14 contract with somebody today, if that's what you want to  
15 do. However, if the committee and advisers think that's  
16 a worthy step forward, we would certainly look very  
17 favorably upon that recommendation. So I'll throw that  
18 out to the committee and technical advisers.

19 MR. MASTRONARDI: Would it be out of order to  
20 see if there is anything additionally here today from  
21 anyone in attendance before we answer that?

22 MR. DYKES: I definitely think we could  
23 certainly -- I'm not going to take any comments now. If

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2 something during public comments prompted a change of  
3 opinion or ideas, absolutely, sir.

4 MR. MASTRONARDI: You provided us with hours  
5 of viewing pleasure.

6 MR. DYKES: Just wanted to fulfill the request  
7 that was presented. Other comments on a third-party  
8 review, the process and proceeding?

9 MS. JORDAN: I have one question on that.  
10 Where does that possibility come from?

11 MR. DYKES: The option, internal staff at the  
12 commission, we talked about it following the September  
13 10th meeting. We thought that was a viable option that  
14 we ought to consider. The reason we asked the TAC to  
15 serve, the newer members now, those that have been here,  
16 those that are leaving, the reason we had advisers, is  
17 because we at the staff of the commission are not  
18 scientific experts. The reason we went through a bid  
19 process, and Mr. Sprague with TRI successfully won the  
20 bid, is because we don't do testing. So when we're  
21 receiving comments at the staff level from folks that  
22 are scientific in nature that are providing information,  
23 TRI provided us a scientific response back. We're not

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2 scientists of that nature. If this group feels  
3 comfortable, passing judgment is probably the wrong  
4 word, but making that decision, then I would like to  
5 hear that. If you don't feel comfortable with that, I  
6 want to hear that also.

7 MR. MASTRONARDI: Is there anyone on the TAC  
8 that would like to see GDOT's installation details and  
9 compare them to these images available? I encourage you  
10 to look at that, if nothing more than to see the  
11 installation does not match our guidelines.

12 MR. DYKES: If anybody wants to take a look at  
13 it, that's certainly agreeable.

14 MR. HAMIL: I've listened to all this stuff,  
15 and this is the second meeting I've been to, and all  
16 this technical stuff, having been retired for 20  
17 something years, is a little above my head. But I've  
18 reviewed plans and been out and inspected, used to go  
19 out to the jobs when I was in the design office, and  
20 I've seen a lot of failures and I've seen a lot of  
21 things that worked. I think the silt fence will work.  
22 I think the socks will work. One of the biggest  
23 problems I see is something that y'all haven't even

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2 mentioned, or two things we haven't mentioned. Where  
3 you got a steep slope and a lot of soil coming off, one  
4 row of either one of them won't work. You have to put  
5 in two rows. A lot of the designs I've seen have two  
6 rows in them. That provides in my opinion a much better  
7 situation than just testing single rows.

8 Another thing is several of the plans I  
9 reviewed at a place downstream of the site, they require  
10 turbidity. I haven't heard a single word about  
11 turbidity. I know EPD has a serious concern about  
12 turbidity. With the clay soil we have in north Georgia,  
13 the clay module is very small and it goes through  
14 (Inaudible). The socks will help reduce that to some  
15 extent. How much? I don't know. But going through  
16 that much silt material it will reduce the turbidity.

17 Another problem I have is cost. This test  
18 cost I think a little over \$6,000. You have to test  
19 every product that they have. That could mount up. If  
20 you have four or five products, that could mount up to  
21 quite a bit of money. A lot of these are small  
22 companies (Inaudible) put some of them out of business.  
23 Plus the testing facilities have been set up, I presume.

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2 I would like to ask, Brent, where did they get the money  
3 to pay for all these tests and setting up the facilities  
4 and everything.

5 MR. DYKES: Are you speaking of TRI, or who  
6 are you speaking of, Mr. Hamil?

7 MR. HAMIL: TRI is the only one that does the  
8 testing. Is that not correct?

9 MR. DYKES: I do not have the correct answer  
10 to that. Ben, do you know anybody else that can do the  
11 testing?

12 MR. RUZOWICZ: I believe TPI is in the process  
13 of setting up to do the tests right now. And I believe  
14 there are a couple of private companies that already  
15 currently run the test, but without talking to them and  
16 getting it confirmed I don't want to start saying a  
17 bunch of names.

18 MR. HAMIL: Is it the same test TRI developed?  
19 TRI set up the site. I presume that cost a lot of  
20 money.

21 MR. DYKES: We went through a bid process to  
22 pay the testing entity based upon the technical  
23 qualifications of the bidder in combination with costs.



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2 What they had on site prior to us working with them I

3 have no knowledge, to be honest with you.

4 MR. HAMIL: Exactly how much have y'all set up  
5 to pay them?

6 MR. DYKES: Over \$100,000.

7 MR. HAMIL: That gives them a big advantage.  
8 They've already got the site set up. To set up a new  
9 site you have to spend money, and I don't believe people  
10 can afford to compete for that price. I think there  
11 ought to be a much simpler test that doesn't cost so  
12 much. I would love to see Georgia DOT set up a much  
13 cheaper test that people can afford that would give  
14 basically the same results. To me, doing all these  
15 calculations, all we want to know is how much silt is  
16 retained, what percentage, and come up with a simple  
17 test and evaluate what percentage would be retained.  
18 And you also need to evaluate the turbidity that comes  
19 out from the different soils. I think we do have some  
20 turbidity information, don't we, Ben?

21 MR. RUZOWICZ: The turbidity is in the results  
22 that you were provided.

23 MR. HAMIL: I haven't heard mention of it.

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2 MR. DYKES: It hasn't been discussed, no, sir,  
3 but it is in the results.

4 MR. RUZOWICZ: People can look at it and use  
5 that information for what they would like.

6 MR. HAMIL: Okay. Well, I think the test is  
7 too expensive and I think GDOT should come up with a  
8 simpler, much cheaper test, without going through the  
9 multitude of tests of each product with these  
10 variations, et cetera. And how much additional better  
11 information is that going to give you than a simple  
12 test? So those are my questions about the whole thing.  
13 I've listened to all these arguments and the charts and  
14 all that. To me the proof is in going out and looking  
15 in the field and see if it works.

16 MR. DYKES: In response to the comments  
17 related to DOT doing the testing, we've had  
18 communications with DOT for years about this. And the  
19 reason the commission went and sought a grant is it  
20 wasn't being done at DOT. And they had other plans  
21 moving forward, and certainly DOT changes leadership,  
22 but --

23 MR. HAMIL: I think the DOT set up a test

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2 procedure. When I was chairman of Water, we had a test  
3 testing the sewage in the water. I know there's a good  
4 many companies here that do testing. Why can't DOT set  
5 up a simple procedure so that local folks can do it?  
6 Right now you have to go to South Carolina.

7 MR. DYKES: I'll let DOT respond to that. I  
8 don't do DOT testing.

9 MR. MASTRONARDI: Mr. Hamil, we certainly  
10 appreciate your confidence in us. We like to think we  
11 could undertake that challenge, but we simply don't have  
12 today full-scale, large-scale testing established. Our  
13 physical (Inaudible), so we're not currently equipped to  
14 do that. I do think you brought up a point to tie back  
15 to the point I make. If 11340, if it is a working test,  
16 how are we going to, with an independent lab, how would  
17 you specify -- I mean, if we do get an ASTM  
18 specification, it would just be this test; correct?

19 MR. RUZOWICZ: The testing methods and  
20 procedures were all posted on the Website, and that's  
21 how they were to be followed.

22 MR. MASTRONARDI: If somebody were inclined to  
23 want to go into testing, would they build a large-scale

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2 testing facility that only accommodates 11340 or could  
3 they utilize those test beds for other testing? Britt  
4 is shaking his head in the affirmative. So I guess that  
5 is a point, though, in terms of, if there's only one or  
6 two people out there today, to your very astute point,  
7 would you make the \$100,000 investment to get going if  
8 somebody is already out there (Inaudible) \$6,000 per  
9 shot?

10 MR. FAUCETTE: I can address some of this, not  
11 all of it, and Joel is well equipped to handle some of  
12 this. I know this facility has been around for quite  
13 some time so it was built based off of this grant or  
14 funding for this grant. He's been doing this testing,  
15 some similar testing, for quite a while. His company I  
16 believe originally built that lab, although I'll let  
17 Joel explain that. There are several facilities across  
18 the country who can do this testing, and that was an  
19 important component we decided upon, whether this was an  
20 appropriate test. More than one lab can do it, so there  
21 is competition among labs, and folks don't feel like  
22 they have to go to one lab to do all this testing  
23 (Inaudible). I think that's an important distinction.

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2 Of course, they all may charge something different,  
3 something much less. And we would anticipate that as  
4 more testing is done, the price could or would go down;  
5 not stay the same or go up.

6 I do know years ago, a little bit of response  
7 to Kirby's comment, I used to work with the University  
8 of Georgia engineering department, and we actually  
9 looked at building a large-scale testing lab with state  
10 funding and federal funding, and I think Brent was  
11 probably part of that group too. We found that it's  
12 simply too costly. We couldn't get the funding to do  
13 it. The University couldn't do it on their own as well.  
14 So it wasn't for lack of trying. We were really wanting  
15 to do it, have a state-run facility at the University.  
16 We just didn't have the funding.

17 MR. RUZOWICZ: In discussion at previous TAC  
18 meetings, one of the things, after we had talked about  
19 going with this test method, 11340, was the fact that it  
20 closely or similarly followed the 6459, which is  
21 possibly already set up on some other people's sites.  
22 So it might be, using that and the other two together,  
23 it might be a lot of easier for some of the existing

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2 studies that don't have it to switch over to a test like  
3 this. That was just one of the little pieces that we  
4 talked about.

5 MR. HAMIL: The P Factor is based on how much  
6 soil the product retained. The percentage of that in  
7 some way is used with the standard to come up with the P  
8 Factor. Why do you need to go through that process?  
9 Why don't we just have a test that just comes up with  
10 the percentage of material retained? And that could be  
11 done with a very small test site.

12 MR. FAUCETTE: The original TAC Committee did  
13 discuss this. In fact, cost and scale was an initial  
14 concern when we first started talking about the  
15 performance testing. The group felt, and I don't want  
16 to speak for everybody, but my feeling is the group felt  
17 we wanted a larger-scale test because it would more  
18 closely replicate field conditions as much as we  
19 possibly could. We obviously wanted to do a  
20 standardized test, something that had already been  
21 established and used, and that's how we decided upon  
22 what we have. We didn't feel like it was our place to  
23 create a brand-new test from scratch. There were

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2 concerns about making it too small, and if it was too  
3 small, it wouldn't replicate real world conditions.

4 MR. HAMIL: Why couldn't you make it more  
5 economical? It's a lot of money. Where did the grant  
6 come from? Was it a federal grant or state grant?

7 MR. DYKES: It was a federal grant through the  
8 Environmental Protection Agency that came through the  
9 Environmental Protection Division that the commission  
10 competed for and received through EPA.

11 FROM THE FLOOR: The total grant was \$256,000.

12 MR. HAMIL: \$256,000 of our federal taxpayer  
13 money has been spent on this process that we're going  
14 through?

15 MR. DYKES: On the process. Testing, manuals,  
16 yes, sir.

17 MR. HAMIL: I think that's a waste of my  
18 taxpayer's money, but that's just my opinion.

19 MR. FAUCETTE: I can speak to that a little  
20 bit. The 319 grants which the commission got to do this  
21 project, they are actually used quite commonly in other  
22 states to revise their (Inaudible). The state's  
23 probably pretty lucky to get that grant, but it is

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2 common for states to get that money from EPD to use it  
3 for this type of use.

4 MR. HAMIL: I have no further comment.

5 MR. MASTRONARDI: I think I've said once  
6 already I'm stubborn so I'll hold to that. I think the  
7 question at the table was regarding a third-party test.  
8 I would ask this question --

9 MR. RUZOWICZ: Third-party review.

10 MR. MASTRONARDI: Third-party review. I will  
11 ask this of the folks here, both new and old: So if the  
12 department demonstrated the installation wasn't correct,  
13 it would demonstrated give you no pause as a group? It  
14 would give you no reason to consider any other actions?

15 MR. HAMIL: Could you repeat that?

16 MR. MASTRONARDI: If demonstrating that the  
17 installation of the check dam was not in GDOT standards,  
18 would it not give the group any pause? You have a  
19 question about third-party analysis of this. I don't  
20 know that that's the question that needs to be answered.

21 MR. DYKES: Marc, is your question related to  
22 just the use of silt fence by DOT in the check dam  
23 installation or are you talking about the whole process?



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2 MR. MASTRONARDI: I'm merely speaking of check  
3 dam installation. I made the offer and I'm really  
4 disappointed that no one raised a hand to say they'd be  
5 interested to see it.

6 MR. HAMIL: I don't think silt fence should be  
7 used for a check dam, because, especially on DOT  
8 projects, after they get them installed and leave them  
9 there, the mowers come along and just tear them all to  
10 pieces. I think for a maintenance purpose you don't  
11 need the riprap and whatever, or the socks. Generally  
12 the bat-wing mowers go over them, makes (Inaudible) and  
13 go over it, and the check dam would be left in place.  
14 To put a silt fence out (Inaudible) going to be torn up  
15 immediately after the DOT mowers (Inaudible) come along  
16 (Inaudible).

17 MR. MASTRONARDI: We do require check dams be  
18 removed when the site's been stabilized.

19 MR. HAMIL: So if it would be removed, I would  
20 have no problem with that, but (Inaudible) the erosion  
21 continues after you get through (Inaudible) grass.

22 MR. MASTRONARDI: We're trying to do better.

23 MR. PARKER: To Item 4, I think we should

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2 consider independent third-party review of the testing,  
3 but we have to weigh the cost, the time. I don't think  
4 we need it. I think it would be helpful, helpful for me  
5 personally, probably helpful for everyone just to hear  
6 another opinion.

7 MR. FAUCETTE: I'm open to the possibility as  
8 well. I do have a concern on the time it would take and  
9 the cost, but I also do feel like that job is the job of  
10 the technical advisers of the committee. And if we feel  
11 like we can't do that, then we should retain a third  
12 party. But I feel like initially that is our  
13 responsibility as part of the committee to review it and  
14 decide on that.

15 MR. HAMIL: If you're only concerned about the  
16 cost of additional study, you ought to also be concerned  
17 about what it's going to cost these people to have it  
18 tested. If it's testing all their products every three  
19 years, that's going to amount to a tremendous amount of  
20 money that project developers are going to have to pay  
21 out. That's a tremendous cost too that needs to be  
22 taken into evaluation.

23 MR. SPRAGUE: Since we're coming back to cost,

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2 I don't know if you'd like a little information on it.

3 MR. DYKES: Would the committee like  
4 information on cost?

5 (No response)

6 MR. DYKES: Joel, we'll ask you to provide  
7 that.

8 MR. SPRAGUE: As Britt alluded to, the program  
9 was set up so that it developed the methodology as  
10 clearly as we could so that other labs could do it. The  
11 test slopes we used we actually built for this, and the  
12 two slopes completely built cost \$6,000. So if that's  
13 prohibitive for a lab to set up, I would be very  
14 surprised. On October 1st the NTPEP opened up the  
15 submittals for this testing because they're convinced  
16 this is the right way to go regardless of what comes out  
17 of this organization. So the NTPEP, for those who  
18 aren't familiar, is the National Transportation Product  
19 Evaluation Program, which is run by ASHTO, the American  
20 Association of State Highway Transportation Officials.  
21 And so they have launched a large-scale testing program  
22 so folks can get this testing done through them  
23 independently and it be dispersed to all states. So any

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2 manufacturer who spends this money -- and Mr. Hamil,  
3 you're right, it's a lot of money. There's no hiding  
4 that. But it's a pretty big bang for the buck that's  
5 provided with that one-stop testing capability.

6 Quite honestly, it's gaining momentum. More  
7 and more states every year are participating in NTPEP.  
8 Georgia DOT does on some of the programs itself. So I  
9 think the cost issue is -- well, at least now you can  
10 put it in perspective. Our lab director also said we  
11 have a standing policy: Anybody who thinks they got a  
12 bad test, come on, bring it back, we'll retest it. If  
13 we get the same result, you just pay for it again. If  
14 we don't, we suck it up. So, yeah, if you really feel  
15 like this is a bad test, any of you, let's rerun it  
16 under that agreement. And this is a standing offer, and  
17 we do it with all of our clients all of the time, and we  
18 hadn't had to suck one up yet. And that's why we did  
19 these retests along the way. We need to be absolutely  
20 sure that we've done the best job of testing we can.  
21 And there are little tweaks here and there, but will it  
22 change the result?

23 THE FLOOR: Are you the lab for NTPEP for all

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2 these tests?

3 MR. SPRAGUE: We are currently the lab. It  
4 comes up for contract renewal every two years, I think.

5 REPRESENTATIVE KNIGHT: I'm going to ask the  
6 moderator also obviously of the agenda, but I want to  
7 ask that you bear with me. I've got I think some  
8 information that bears directly to what this board is  
9 now discussing and certainly what Mr. Sprague has just  
10 proposed. I don't know if that would be permissible.  
11 I will go ahead and tell you that what I've got probably  
12 will take a few minutes, but I think it is very, very  
13 pertinent to the discussion that this committee is  
14 having, not only this committee, but the ramifications  
15 of what's going to happen across the state. I would ask  
16 that you as the director and the committee allow that.

17 MR. DYKES: I'll defer to your comments. I  
18 would ask that you come closer to the court reporter.

19 REPRESENTATIVE KNIGHT: I'm actually going to  
20 set some things up. I think this is very pertinent to  
21 this discussion.

22 MR. DYKES: In the interest of time let's take  
23 a ten-minute break so we can get the computer set up.

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2 We'll reconvene at 12:00 noon.

3 (Break)

4 MR. DYKES: We are going to call the meeting  
5 back to order. Representative David Knight.

6 REPRESENTATIVE KNIGHT: First of all, I want  
7 to say thank you. Director Dykes, I appreciate you  
8 accommodating this. Obviously this has been an area of  
9 contention for a while for a lot of different reasons.  
10 As you start to look into how this affects not only the  
11 people, the industry or whatever, you start to look at  
12 how it affects Georgia, you start to look at it in how  
13 it affects our environment. And there are a lot of  
14 things that from a policy point of view or the legal  
15 perspective, that we're bumping up against some time  
16 here, quite frankly, with code and things like that, and  
17 I don't know if this committee and industry realize  
18 this. I guess that's the purpose of what I wanted to  
19 come up here and do, what I'm going to do. Hopefully it  
20 will lend some more information to this committee as  
21 they come and look at exactly what y'all were just  
22 debating.

23 First of all, I want to tell you this started

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2 out as an industry versus industry issue, and I know  
3 some of you probably see it that way. I guarantee you  
4 it's not. At the General Assembly we see a lot of  
5 people fighting over things, and it's about that. But  
6 this issue is beyond that refereeing between competing  
7 industries. This is about Georgia's environment. It's  
8 about budget, tax dollars. It's about making sure we  
9 get this right. I'm talking about very right because  
10 the eyes of the entire nation, the way I understand it,  
11 are looking at Georgia right now.

12 Real quick, I want to tell you there's been  
13 some comments made about me. I want to tell you I am a  
14 lifelong Georgia resident, and some people in this room  
15 know me. I love the outdoors, from fishing in the  
16 pristine trout streams of North Georgia, to our coast,  
17 to all in-between. I love being outside and I care  
18 truly about what goes on and about what this issue, how  
19 this will affect our environment. So I want to let you  
20 know that, because I know that there's been comments  
21 made or implied otherwise.

22 With that, I'm going to ask Mr. Sprague to  
23 maybe join the conversation up here, because I want to

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2 make sure I've got some information correct as I look at  
3 this as a CPA. I'm not an engineer. As you start  
4 reviewing this stuff, these are things that I had some  
5 questions about. Reading all these reports, especially  
6 that dadgum Athens report, and looking at it, and going  
7 back through the TRI report that came out, I want to  
8 make sure that I understand some things and make sure  
9 that the committee is focused in on some things.

10 When it comes to moisture content, how is  
11 moisture regulated during the test preparation? Give me  
12 a little idea.

13 MR. SPRAGUE: It's measured, and the test  
14 method requires -- I think you're talking about  
15 specifically test method 11340?

16 REPRESENTATIVE KNIGHT: Yeah. That's on the  
17 slope.

18 MR. SPRAGUE: The slope. It's required that  
19 it be between four percent above what's called optimum  
20 moisture content and four percent below optimum moisture  
21 content. So what we do is we take a sample of the soil  
22 and have a test done on it, a proctor test which  
23 establishes the optimum moisture, optimum density of



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2 compaction, that relationship. And that gives us what  
3 the so-called optimum moisture is. Then we measure,  
4 before we run the test, by taking samples at three spots  
5 on the slope and taking them in and drying them to  
6 establish that we're within that plus or minus four  
7 percent. And if we're not, and it's almost always  
8 because it's too dry, then we have to wet it down before  
9 we run the test. If it's too wet, we have to till it up  
10 and let it dry and recompact it. So it's all about  
11 doing that measurement before we finish the test setup.

12 REPRESENTATIVE KNIGHT: Again, guys, y'all  
13 forgive me. I know y'all are engineers up here so you  
14 may get this, but I want to make sure I understand this.  
15 So if you look at the different plots and, say, some  
16 plots were different than others, drier than others, in  
17 other words, you start out differently, were there any  
18 that you found? And then how do you put that into your  
19 test results? In other words, if Plot A over here is a  
20 little bit different than Plot B as far this moisture  
21 measurement, how do y'all account for that?

22 MR. SPRAGUE: As long as you're within the  
23 prescribed range, there's no adjustment. That's

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2 considered a good test, and then presumably that's one  
3 of the factors that factors into this thing called  
4 repeatability of the test method. So I guess what we  
5 could do is we know what the repeatability is because we  
6 got that data back from ASTM. We could look and see  
7 what range of moisture contents were on each of those  
8 controls to see if there was some relationship between  
9 moisture ranges and this repeatability number.

10 REPRESENTATIVE KNIGHT: But again, if you've  
11 got different moisture contents, it could ultimately  
12 affect the P Factor.

13 MR. SPRAGUE: Well, yeah, I think it's fair to  
14 say it could. What we as a testing lab do, and I guess  
15 it's because the designers of the test know that there's  
16 kind of a practical range or else you're forever trying  
17 to prepare this thing to get it exactly. Typically we  
18 are right around 20 percent optimum with the Georgia  
19 clay. So I think, and it's quite fortuitous that it  
20 came up during the discussion, the repeatability of  
21 these tests is really good. Compared to a lot of much  
22 smaller tests, this is really good stuff.

23 REPRESENTATIVE KNIGHT: And reading that

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2 stuff, you talk about wind, you talk about your guys  
3 getting up early, so I assume that wind has an affect on  
4 testing.

5 MR. SPRAGUE: It has an affect on the  
6 uniformity of the rainfall distribution. And that's why  
7 we put out the cups to actually measure what's  
8 happening. And at times we have to tweak the pressure  
9 on each tree to get it. But once again, it's a  
10 necessity of doing this scale of testing. Part of the  
11 reason for three replicates is so that you're not just  
12 going to one single set of data to describe everything.

13 REPRESENTATIVE KNIGHT: I get that, but if  
14 you're doing protocols and you prepared this thing the  
15 prior day, how do you account for wind and things? Does  
16 that dry it out overnight?

17 MR. SPRAGUE: We do the moisture content right  
18 before we run the test. And we use a microwave so that  
19 we can turn around -- because basically you take a wet  
20 weight, dry it all out, take the dry weight, and the  
21 difference is the amount of moisture.

22 REPRESENTATIVE KNIGHT: I know in some of  
23 this, the testing and the discussion, you're talking

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2 about blowouts. I mean, can you define -- I mean, I  
3 want to make sure I understand what constitutes or how  
4 you define a blowout.

5 MR. SPRAGUE: We use that term in the check  
6 structure testing, 7208 channel testing.

7 REPRESENTATIVE KNIGHT: In regards is there  
8 any type of a situation, blowout in slope testing?

9 MR. SPRAGUE: That's what's been a lot of  
10 discussion. That's what the test tells us to prevent  
11 from happening. Blowout would be something that happens  
12 under or around. This came up at the other meeting, and  
13 it's a good point. We probably need a definition for  
14 that term because I've used it in the report, but that's  
15 the intention, is when there's a sudden -- I can't say  
16 blowout because I'm using the term, but when there's a  
17 sudden release under or around the device.

18 REPRESENTATIVE KNIGHT: And did y'all have  
19 any?

20 MR. SPRAGUE: We didn't have any in the --  
21 I'll have to go back and review because I'm not out  
22 there for almost all of the testing. But if there was  
23 anything in the slopes, then they were directed to try

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2 and eliminate it because that's what the method tells us  
3 to do. That was kind of the criteria for stopping the  
4 tests in the channel testing, if suddenly there was just  
5 a give-away on one of the check structures, which  
6 happened with the straw bales when they were set up  
7 according to the existing technique that the Georgia  
8 Soil and Water had at the time and for that particular  
9 configuration of the silt fence installation.

10 REPRESENTATIVE KNIGHT: So what you're saying,  
11 you don't think there were any necessary blowouts, and  
12 if you did, you tried to fix them.

13 MR. SPRAGUE: Back on the slope, that's right.

14 REPRESENTATIVE KNIGHT: The check dam.

15 MR. SPRAGUE: The check dam would be in the  
16 channel.

17 REPRESENTATIVE KNIGHT: So from a procedural  
18 point of view, if you had one of these blowouts or  
19 occurrences that we're trying to define here where it's  
20 going up under, you said we try to fix it. So what is  
21 the procedure for dealing with that, and do you document  
22 those?

23 MR. SPRAGUE: That's where we had the

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2 Bentonite.

3 REPRESENTATIVE KNIGHT: So do you document? I  
4 mean, in the testing how do you document?

5 MR. SPRAGUE: I would say we probably did not  
6 have a specific place where we documented that.

7 REPRESENTATIVE KNIGHT: And then again, great  
8 discussion going around with the Bentonite stuff. And  
9 again, I don't want to replot ground that we've talked  
10 about, that the committee has addressed. But again, the  
11 purpose of the Bentonite, I know I read the standard, I  
12 mean, the WK 11340, and again, as you look at this, the  
13 plastic is installed, and you don't want the water to  
14 exit the plot without, while doing the down-slope  
15 erosion. And then again, going back, and I know you've  
16 read this: "Place the SRD so that no gaps are present  
17 along the perimeter barrier and cut the fit as necessary  
18 to cover the width of the plot. Affix the tall  
19 products, logs, wattles, to the boundary by tying or  
20 adhesive such that the water and/or soil cannot escape  
21 around the product but has to go over or through it.  
22 Pond sealing foam is suitable for this task." I guess  
23 that's where I'm having some issues, because the thing

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2 says around.

3 MR. SPRAGUE: And it says after that?

4 REPRESENTATIVE KNIGHT: I understand over or  
5 through, but if you read this, that's what I'm trying to  
6 say. But again, during what I heard you say, and I want  
7 to make sure, is was there any -- all the Bentonite was  
8 used -- was there any used upstream or downstream?

9 MR. SPRAGUE: It was all used downstream.  
10 Well, it was used upstream along the side walls in order  
11 to make sure there was no runaround of the end.

12 REPRESENTATIVE KNIGHT: And then obviously was  
13 there Bentonite applied either -- I would assume y'all  
14 would try to do all this before or during the test or  
15 after the test.

16 MR. SPRAGUE: I think the first two, before  
17 and during, to try and make sure that the seepage went  
18 through or over is how we interpreted that.

19 REPRESENTATIVE KNIGHT: And then overtopping.  
20 That's a thing that I've heard bounced around here, and  
21 I want to make sure I understand this. Overtopping, did  
22 it occur on any of the products in this slope stuff,  
23 slope testing?

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2 MR. SPRAGUE: Yes.

3 REPRESENTATIVE KNIGHT: Is this what is  
4 considered a failure or not a failure as far as  
5 overtopping?

6 MR. SPRAGUE: There is no such thing as a  
7 failure.

8 REPRESENTATIVE KNIGHT: But obviously, if  
9 you've got water going over and it's overtopping, it  
10 would have direct results and affect the P Factor  
11 ultimately calculation.

12 MR. SPRAGUE: Yeah, that device will reflect  
13 that in the calculation of the P Factor.

14 REPRESENTATIVE KNIGHT: And then the final, I  
15 want to make sure I understand this, and I think we went  
16 over it but I want to make sure. Again, tell me the  
17 instructions were followed for installing the various  
18 products and practices for the 11340; right?

19 MR. SPRAGUE: No, no, no. The 11340 tells you  
20 to install it in accordance with what your client tells  
21 you to do. So the client has instructed us in the RFP,  
22 the scope of work, which system needs to follow which  
23 installation.



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2 REPRESENTATIVE KNIGHT: And again, I want to  
3 make sure I understand this from an outside-the-industry  
4 point of view. If Georgia Soil and Water has something  
5 on their list, it would probably be a hierarchy. If  
6 they you got to follow the Georgia Soil and Water  
7 manual, our instructions, you would follow that. If it  
8 didn't say that or they said go to the manufacturer's  
9 installation recommendation, you would do that. And  
10 then obviously, if it was GDOT, it would be the GDOT  
11 instructions.

12 MR. SPRAGUE: That's right.

13 REPRESENTATIVE KNIGHT: And the thing that I  
14 want to make sure I'm clarifying is that, and again,  
15 reading this report, when we go to this, the purpose of  
16 this test is to do a standard test to look at this. So  
17 when you look at this testing, I assume that you're  
18 doing what is posted, which -- and y'all jump in here  
19 with me, but that's sort of the minimum that's out  
20 there; right? In other words, if you go in the manual  
21 and here's what the minimum is, if it's four stakes,  
22 that's four stakes, you're going to go to the minimum,  
23 everybody's minimum. No matter what the instructions

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2 come from, you're going to everybody's minimum; right?

3 MR. SPRAGUE: What we're going to do is I  
4 guess our best understanding of what we're asked to do  
5 and then report that. So all of our results include the  
6 installation.

7 REPRESENTATIVE KNIGHT: Okay. Maybe that's a  
8 question for Georgia Soil or Ben. But, I mean, if we're  
9 trying to replicate field conditions, we're going by  
10 these instructions, and I assume that's what's in the  
11 book. So we're going to that minimum. In other words,  
12 if it says every four feet, you do every four feet;  
13 right?

14 MR. RUZOWICZ: Yeah. I mean, to be a hundred  
15 percent sure we need to look at the RFQ or whatever that  
16 document is to see exactly how it was written.

17 REPRESENTATIVE KNIGHT: And I appreciate that.  
18 But what I want to do is I want to look at some things.  
19 Y'all forgive me. This is some of the video. One of my  
20 questions was have you had an opportunity to look at it.  
21 Obviously by looking at the disks in front of you, you  
22 have not had an opportunity to look at this. But it is  
23 out there. And I have looked at it, and these are some

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2 of the things that I wanted to point out to the  
3 Technical Assistance Committee. These are -- again, I  
4 got these from open records of Georgia Soil and Water,  
5 and this was the video testing from TRI.

6 (Video shown)

7 What I get from this, it looks like even they  
8 notice from a visual point of view it was a whole lot  
9 more runoff in this test plot, and again, the  
10 acknowledgment that it rained last night. Let's look at  
11 the next one.

12 (Video shown)

13 As I look at this one, looks like they are  
14 talking or looking at the lack of a runoff. This is 15  
15 minutes into the testing and they are sitting there  
16 looking for runoff. There's nothing obviously getting  
17 through the product, and they said they didn't see any  
18 backing up behind the screen.

19 MR. SPRAGUE: Very common.

20 (Video shown)

21 REPRESENTATIVE KNIGHT: They're talking about  
22 the Bentonite that's in the water. I don't know much  
23 about particles in the water, but it should be I guess

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2 mud in the water and water? But I'm not sure about what  
3 are the residue or particles that would be coming off it  
4 of Bentonite.

5 MR. SPRAGUE: It's all by weight. Those are  
6 so light we couldn't even measure them with the accuracy  
7 of the scale.

8 (Video shown)

9 REPRESENTATIVE KNIGHT: As I looked at this  
10 one, I was like, if this is prior to the test, it looks  
11 like it's already absorbed a great amount of water or  
12 the test plot may not be even in, again, the variables  
13 or the standards that should be set up to make sure that  
14 test plot soil is exactly by whatever the standards are  
15 that have been set, and it should be applied on each and  
16 every test.

17 (Video shown)

18 I'm focused on the plastic that's up on the  
19 top of the hill there. Looking at the weather -- I'm  
20 not sure how far the testing facility is from Anderson  
21 but I would bet it's pretty close. That's some wind  
22 data and wind speed that was recorded that day. I'm  
23 sure everybody can go and look that up. Right here,

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2 again, I don't know much about this, but when we talk  
3 about wetting the plot and doing it evenly, the purpose  
4 is to make sure the entire test plot gets a uniform rain  
5 amount. I think I'm correct on that, but it looks like  
6 the left side there is relatively dry compared to the  
7 right side. And if you look at the cup, it looks like  
8 the cup on the right side has a lot more water in it  
9 than the cup on the bottom side. We talked about  
10 blowouts, and this is one of the small blowouts.

11 (Video shown)

12 I'm not sure how it's measured. If there is a  
13 blowout, I'm not sure that that would be the fault of  
14 the product or the installation, but certainly with the  
15 amount of sediment that was going into the catch tray  
16 there, I don't understand how that would be fitting to  
17 the data.

18 (Video shown)

19 I'm not sure what the protocol is for  
20 significant blowouts or errors or whatever you want to  
21 call it. I would think there would be some kind of  
22 protocol that you start the thing over. As you saw,  
23 there was an exceeding amount of water and sediment that

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2 was released during the blowout. As you can see in all  
3 three progressions of the video, it's still off the same  
4 slope and test slope.

5 (Video shown)

6 I apologize for the length of this one but I  
7 think it is interesting. If you'll focus to the bottom  
8 left corner around the corn stalk or the leaf of the  
9 corn stalk there or whatever it is, right there, you'll  
10 start to see the sedimentation start to come out right  
11 there. See it?

12 (Video continued)

13 You'll notice it's still flowing.

14 (Video continued)

15 It's on the inside of the product right there.

16 (Video continued)

17 It's still running.

18 (Video continued to conclusion)

19 I'm sorry for the long length of that but I  
20 think what astounds me was the amount of sediment that  
21 came out. And if I remember correctly in the prior  
22 discussion in Athens, from reading the transcript or  
23 looking at the test, one of the questions or concerns

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2 was how was there a blowout. There was a blowout  
3 mentioned, but in the 6th Edition on the 6-inch test it  
4 only had one gallon more runoff than the 2- and 4-inch  
5 event. Again, I'm not an engineer, but I'm not sure how  
6 you do that. Plus the concerns and comments from  
7 whatever other videos that may contain those other  
8 blowouts seem catastrophic to me with the "Whoosh!"  
9 Believe it or not, I found that video Sunday night as my  
10 wife was hollering at me to come to bed. I found that  
11 Sunday night.

12 (Video shown)

13 I want, again, a protocol between setting the  
14 test up the day before and the night. If it's going to  
15 rain, I would think there would be some kind of protocol  
16 or protection of the test site such that the water from  
17 overnight rain, if potentially there was rain, would be  
18 accounted for to make sure that that test site continues  
19 to be in a proper condition and properly set up to be  
20 tested the next morning. I also thought I read where  
21 the fence was not supposed to be set up until the next  
22 morning. I'm not sure if I read that in the ASTM or  
23 not. I may be incorrect on that.

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2 (Video shown)

3 There's some mention of a TAC member showed up  
4 at the test, and about the middle of the video, Dr.  
5 Faucette, I think you're the one that showed up on your  
6 test. How that plays out I don't know, but I will tell  
7 you that this test was paid for by Georgia dollars and  
8 federal dollars. That video you just took, if it's  
9 being used for any kind of commercial use, that is  
10 called the Gratuity Clause of the Constitution of the  
11 State of Georgia. That is the property of Georgia Soil  
12 and Water and the State of Georgia.

13 (Video shown)

14 I haven't quite figured out the industry and  
15 all this testing, but it seems to me there is a conflict  
16 of interest there in regards to talking about recruiting  
17 and this testing method, that this is pioneering  
18 something, from a TAC Committee member and an employee  
19 of TRI. I'm not sure what that has to do with trying to  
20 come up with an objective test that this state is going  
21 to run by, nor what apparently the rest of the nation is  
22 looking to us to follow the lead.

23 We had a great discussion today, or y'all had



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2 in your TAC Committee about installation methods, and I  
3 hate to pick on it, but, Dr. Faucette, you're the R&D  
4 director for Filtrexx and I want you to know in the  
5 video you're pretty close. Best I can tell according to  
6 the RFP, and I do have it right here in this notebook,  
7 it's to follow the manufacturer's instructions. And if  
8 I look at this, it looks like it is on 10-foot centers.  
9 If you look at that video again, and I'll be happy to  
10 rewind for the pictures, it certainly appears with an  
11 8-foot wide slope, and even with those boards that are  
12 coming and cutting it off, you've got four posts there.  
13 I'm not sure if you missed it or if you didn't. Or to  
14 Mr. Sprague, did Georgia Soil and Water or Ben not send  
15 you what was supposed to be used or did you look at a  
16 wrong reference? I don't know. Guys, this is from the  
17 6th Edition book. If you look at it, wooden stakes are  
18 every four foot on center for the sensitive, which is  
19 the old C-type fence, and six foot off center or on  
20 center for the nonsensitive. I'm not sure how this was  
21 tested or for what it was tested for, but either way you  
22 just passed a product that was overinstalled even  
23 according to what your new state-of-the-art manual calls

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2 for.

3 My understanding is, and I want to make sure I  
4 understand this for what these implications mean to us  
5 and the State of Georgia and these agencies, according  
6 to the code that I've read, if you follow what's in the  
7 Green Book and all these people out here are using this  
8 on these construction sites or wherever it is, you're  
9 using this and you're going by what the Green Book says,  
10 you've got to protect some liability should some type of  
11 erosion event occur; in other words, you can go back and  
12 lean on "I did it according to Georgia Soil and Water  
13 standards." You just approved a product that doesn't  
14 even meet or wasn't even installed and tested based on  
15 what your new Green Book calls for. I wonder what kind  
16 of liability issue potentially could be out there.

17 There's a picture of it, 8-foot centers. I  
18 don't know about the Bentonite, but, my God, that was  
19 probably about three 5-gallon buckets of it.

20 (Video shown)

21 I'm not sure about the protocol, but I know  
22 when I looked through the tests, you had some blowouts  
23 on the check dams. And they were listed, specifically

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2 the C-type fence was listed as blowouts. I don't ever  
3 recall seeing documentation in the test there was a  
4 blowout on the compost filter log there. And what I  
5 thought was funny -- and again, this is something the  
6 TAC Committee can go back and look at and sort of dial  
7 in. I think this was the 1.0 CFS test. So they've done  
8 the .05. This failed. I think if you go look at the  
9 data, they did the 1.5 that day or soon after and came  
10 back two weeks later and did this test. I don't  
11 understand it. I also don't understand the comments  
12 that were made about it's the same place again. By  
13 those comments you could lead me to believe, and again,  
14 I don't know for sure, I'm just going by what's on the  
15 video, that this probably played out before then. And  
16 then also, hey, we handtapped it, we compacted it, we  
17 handtapped it. Was there extra caution given in  
18 preparing the bed site or the slope or the ditch? It's  
19 sort of like they were astounded that it did this.

20 It's the 1.0 that failed. You talk about  
21 installation. Look at that, and if I count this right,  
22 seven stakes. Don't know how wide the bed is, but what  
23 I was able to find on the Internet as far as the

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2 installation of Filtrexx logs was that. And, Dr.  
3 Faucette, you can tell me if that's the correct one. If  
4 I look at that, it looks to be one in the center of the  
5 ditch, and it looks to be otherwise placed on the 5-foot  
6 off center, in other words, every five feet. So if the  
7 installation by the industry is going to be according to  
8 these instructions, you can definitely tell that that  
9 was overinstalled. Even if you go to the Green Book,  
10 the new Green Book that was just passed, if you look at  
11 it and read through and you put one in the center of the  
12 bed and put one on each of the junctions going up the  
13 slope and then four feet, so even by the new Green Book  
14 standard, five. So what is the industry going to do  
15 when they get all this? they going to install it like  
16 this or are they going to install it with seven stakes?

17 (Video shown)

18 If you look at this one -- you talked about  
19 installation. Look real closely. Look at the left side  
20 there. See the sag? It's not according to GDOT. I'm  
21 not an expert, but the Internet is out there, and if you  
22 look at this, it calls for specific wire heights. As  
23 GDOT has already told you, it also calls for making sure

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2 that it's attached at the top with wire. You look at  
3 the sagging.

4 The other thing I couldn't understand -- and,  
5 Mr. Sprague, I know this is in the response, and I know  
6 the TAC Committee members got it. If you look at the  
7 diagram, it says that the out wing was 25 feet. If you  
8 look there, there's four stakes on the top side, meaning  
9 there's probably about three widths in-between. If  
10 those were four feet, that's 12 feet. The other thing  
11 it said is the wings had to be inside the slope. I may  
12 be misinterpreting this, but according to TRI it said  
13 the surrounding terrain slopes away requiring the wings  
14 to run up the side of the channel. In other words, the  
15 way I took that comment before I went back and started  
16 reviewing this, is that you come up the slope where the  
17 gentleman is standing and then it slopes back off. So  
18 in other words, you couldn't go up there and run it off.  
19 I don't know. I will tell you that on the Internet I  
20 was able to get on and look at, there are specifications  
21 for installing these, the wire. It talks about there's  
22 about four different variables, the best I could  
23 interpret.

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2 Guys, I may have done some of the homework for  
3 you. I want to look at the committee for a second.  
4 Listen to me. I've been on committees, both  
5 professional and in my private life, and even in the  
6 General Assembly. We get on these committees and we go  
7 and we've got limited time in our busy lives and our  
8 busy careers, and sometimes we rely on everybody in that  
9 collective sort of momentum to go. And I can tell you  
10 you probably didn't do the homework that I did. I can  
11 tell you, my wife will tell you you have not done the  
12 homework that I have done on this.

13 Guys, this is way, way too important. I  
14 applaud you, or appeal to you, I should say, as TAC  
15 Committee members that this is just not about some  
16 argument about calculations, and I'm not even going  
17 there. I would tell you that looking at these videos of  
18 the actual tests would I hope call into your caution and  
19 maybe even look at is there a need for a third party. I  
20 would tell you that most of y'all I think are engineers  
21 on this committee or serve in some kind of professional  
22 capacity. Guys, this is way too important to the state.  
23 And as you can see what we've done, what's out there

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2 right now, the confusion that's out there, not only  
3 confusion, I'm worried about the liability that is going  
4 to be put on the state and what's going to happen to our  
5 natural resources should the results of this test that  
6 you've actually seen and what you've seen on this test  
7 actually be put in the field. I would tell you at best  
8 I would be very, very suspicious of this test.

9 With that, Mr. Director, I'll be happy to  
10 answer any questions of the TAC Committee, but I know  
11 we're probably late for lunch and people are probably  
12 getting low. We may want to break for lunch and then  
13 come back, but that's your call.

14 MR. DYKES: I'll call the committee back to  
15 the table.

16 MR. SPRAGUE: It does seem like it would be  
17 fair to -- this is a bit of a --

18 MR. DYKES: I just want to get the committee  
19 back to the table.

20 MR. SPRAGUE: Would you like to go through  
21 them? Were those rhetorical questions or were those  
22 looking for real answers? Because we can go back  
23 through them.

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2 REPRESENTATIVE KNIGHT: Again, let me tell  
3 you, I'm not a technical person, Mr. Sprague. I think  
4 now that the committee has seen this, they are  
5 technical, and maybe they can speak to that. I'll be  
6 happy to bring the videos up of this. But I asked the  
7 questions about protocol making sure that I understood  
8 this. And so your comments need to be addressed to the  
9 TAC Committee.

10 MR. SPRAGUE: So those were rhetorical  
11 questions then.

12 REPRESENTATIVE KNIGHT: No. They were serious  
13 questions. Make no doubt about it.

14 MR. SPRAGUE: I understand that.

15 MR. DYKES: As moderator, I want to give the  
16 committee a chance to comment. If not, we'll turn to  
17 Joel's comments.

18 MR. MORAN: I appreciate what you've done, but  
19 this is my second meeting and I don't know what  
20 transpired prior to this. I'll be honest with you,  
21 obviously I haven't seen the total test, and I assume  
22 that's what this is. I appreciate the snapshot that  
23 we've gotten here, but I'd like to see the whole thing



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2 before I try to make any engineering, if you will,  
3 decisions on how the test method works or doesn't work.

4 MR. DYKES: Other comments from the committee?

5 MR. HAMIL: I'll just say this further  
6 justifies my other comment that, based on these films,  
7 it seems to be a waste of taxpayers' money.

8 FROM THE FLOOR: I'd like to hear from Joel.

9 MR. DYKES: Joel, we'll turn to you.

10 MR. SPRAGUE: First off, I think that what's  
11 really good here is that you've gotten a good sense of  
12 what large-scale testing is. If you had an idea that  
13 this was something you do in a clean room, you're  
14 misunderstanding, because you've never been on a  
15 construction site. What we are trying to do is  
16 re-create best we can the real world. Now, when these  
17 tests are going on, whatever happens happens, and we  
18 react to it. And that's the way the test methods are  
19 written. They are realistic. And that's why you have  
20 three replicates, so that you hopefully can get as much  
21 control as you possibly can get. It's not easy to  
22 control all the variables, so you do the best you can.

23 Yeah, you can pick out on this replicate of

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2 this test something that may be interpreted one way or  
3 another. Those technicians did a fabulous job watching,  
4 reacting in a tough situation, making a judgment call  
5 and going with it. What's the option? What's the  
6 option? Something goes a little wrong here, you stop  
7 and you rebuild the test and start over again? Another  
8 \$6,000? Or I guess that's \$2,000. Realistically this  
9 is large-scale testing. So what you've got is what  
10 you've got, and to me it says this is real-world stuff.  
11 This isn't pure. This isn't exacting. This is stuff  
12 that produces a result that can be used to judge the  
13 performance of these materials as they are being used.

14 So I stand by what happened. We had the good,  
15 bad, and the ugly, and the videos and pictures are not  
16 required of this contract. They were provided so -- I  
17 mean, it's all transparent. I thought we were working  
18 on this together to develop what's terribly important  
19 throughout the country, throughout the world. The U.S.  
20 is a leader in trying to figure out what to do with  
21 these sediment retention devices, how to figure out how  
22 they actually perform under simulated real-world  
23 experiences. It's not anywhere near perfect but it's

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2 really darn good. Yeah, we can focus on the little  
3 thing here, there, or the other, but multiple replicates  
4 help us through those hurdles, and that's why that's  
5 part of the methodology. So as we've gotten through the  
6 11340, you've seen it. You've seen the good, bad, and  
7 the ugly, and you've got the results.

8 So you judge whether that's good testing or  
9 not, because the results and the -- the only one that  
10 sticks out to me is the question where that single one  
11 where there was a big release. And what happened there  
12 was you saw the silt fence runs up along the wall, and  
13 what they do is they tie that last post tightly against  
14 the wall, so anything that seeps between the silt fence  
15 and the wall can't come down and make a big flush. And  
16 so that was part of the problem there was everything  
17 going on in that corner making a big flush, but you also  
18 saw in the text one of the technicians saying, "I'm  
19 going to mark gallons." So when he found that he saw  
20 the blowout with the big flow, he went down to the tank  
21 and determined that's where the impact of the higher  
22 flow came. And that's what they're trained to do. So  
23 the data I get makes the adjustment that they try and

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2 make out there.

3 Now, is it on a data sheet? It's not, and  
4 that's our bad. We should have said we made a patch  
5 here, we did something wrong. So good call, and, yeah,  
6 the Representative's ideas on the ways we need to make  
7 this methodology better, absolutely. And that's kind of  
8 why these videos and pictures are there, so that we can  
9 have some discussion on how to tweak this thing. But  
10 the results represent what the testing does. And so I  
11 trust you to judge with that.

12 We followed strict protocol on interacting  
13 with Georgia Soil and Water and the personnel and staff,  
14 and we were wide open, and offered that anyone from the  
15 Technical Committee that wanted to come out and be there  
16 with the testing was welcome. We made that, and we  
17 welcomed anybody and everybody. Ben, you were out at  
18 one time I think as well. So be that as it may.

19 The channel testing, once again I wish these  
20 were real questions that were invited to be answered.  
21 The silt fence test? That's why we did the retest, to  
22 check and make sure that a good installation was done.  
23 Go back and do it again and make sure it's put that way.

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2 Okay. We kind of know we got to look at ourselves  
3 first. The compost sock blowout, a unique situation, in  
4 that we had run the .5 and we had run the 2, and there  
5 was no blowout. And then we ran the 1 and there was a  
6 blowout. So we said -- and you saw it on the picture.  
7 We questioned ourselves on the preparation because there  
8 had been a blowout there before. So we said we got to  
9 get that and recheck the 1. Should we have pointed that  
10 out? Yes, we should have. We certainly gave the videos  
11 and such. We weren't trying to hide anything. But when  
12 we rebuilt it because we had -- the channel is set up  
13 into two test sections, so we kind of got to go through  
14 a whole series of tests and then come back and fill in  
15 afterwards. So that's why the rerun of the one was  
16 scheduled later on. And the data speaks for itself. So  
17 you saw those two things, the 11340 and the 7208.

18 The implications that there's something shady  
19 going on here or inept going on here, you've got to  
20 judge that. What you did get, and it's a good thing,  
21 when you see the videos, this is the world of large-sale  
22 testing. Guess what? It's also the world of  
23 construction sites. I bet you saw a similarity there.

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2 That's what we're trying to achieve. The constraints we  
3 have, though, is doing it in a confined space, and that  
4 became the problem with the silt fence, putting this  
5 configuration into the confined trapezoidal channel we  
6 have to work with. That's a problem with 11340. It's  
7 big, but putting a good representative installation  
8 within eight feet so we don't get runaround, it's tough.

9 So I guess just to finish my thoughts here, I  
10 feel like a lot of this was probably unintentionally  
11 misrepresented. Large-scale testing is just as ugly,  
12 just as nasty as a construction site. You have to make  
13 judgments while the test is going on, and you let the  
14 data guide you as to whether you've accomplished  
15 something worthwhile or not. So I would just suggest  
16 that, if you will, focus on the data and know that we  
17 really worked hard, really hard, long hours, to try and  
18 accomplish the goals of the Technical Committee.

19 MR. HAMIL: I would like to know if the  
20 product passed or failed.

21 MR. SPRAGUE: We don't do pass/fail. We build  
22 a test result. That's all it is, a test result for what  
23 was done, and try to fully represent what was done. The

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2 questions on installation, when we report it, we show  
3 the installation, we describe the installation. There's  
4 nothing hidden. There's no attempt to favor anybody.

5 MR. HAMIL: What's the test for if you don't  
6 come up with a failure or passing?

7 MR. SPRAGUE: That's what your job is.

8 MR. RUZOWICZ: The Technical Advisory  
9 Committee looked at the results and then came up with a  
10 minimum number from what came up with that. So  
11 basically everything except for straw bales would have  
12 made the use as a sediment barrier. It was not to cut  
13 anything out. So then the committee decided do we need  
14 to have something for sensitive areas because there is  
15 already a Type A, a Type B, and a Type C. So instead of  
16 calling it Type A and B and C, they decided that they  
17 wanted to go with calling it nonsensitive because there  
18 can be things other than your traditional type of silt  
19 fence. So that's why they changed it to silt fence.  
20 And they put that number, it came right in the middle of  
21 all the products that were tested.

22 MR. HAMIL: Did the committee discover whether  
23 it passed or failed or not?

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2 MR. DYKES: By the selection of the P Factor  
3 number, yes.

4 MR. HAMIL: So did it pass or fail?

5 MR. RUZOWICZ: Well, it would have made the  
6 nonsensitive in some of them, and some of them would  
7 have made the sensitive. So some of them would have  
8 made both and then some of them would have only made  
9 one, but all except for the straw bales would have made  
10 the nonsensitive.

11 MR. FAUCETTE: It's important in this talk of  
12 pass/fail that all the practices that were in the 5th  
13 Edition are really in the 6th Edition and can be used  
14 widely on construction sites. The only difference is  
15 which ones could be used near sensitive water bodies.  
16 Of course, we can have discussion about that, what the  
17 general effect should be, but there haven't been any  
18 that have been taken out except, I guess, hay bales.

19 MR. RUZOWICZ: It's previously with the silt  
20 fence, two rows of Type C, or you can have one row of  
21 Type C backed by straw bales. Currently that is the  
22 only way in the 5th Edition of the manual that straw  
23 bales is allowed as a sediment barrier, unless somebody



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2 were to certify it as an alternative BMP and want to use  
3 it on their plans. An engineer could do that, which  
4 would still probably be an option through the  
5 alternative BMP process if they had a way to do it.

6 MR. FAUCETTE: I'd also like to address the  
7 question about the staking in both of the tests. I  
8 think it's important to differentiate. There's such a  
9 common misperception in this industry and in regulatory  
10 bodies on the difference between a product and a  
11 practice. In the 6th Edition the compost filter sock  
12 spec is a practice, a generic public practice, because  
13 there's lots of different companies that manufacture,  
14 that make this. In fact, the new spec that's in the 6th  
15 Edition reflects pretty closely what a lot of other  
16 publications have had in their manuals from different  
17 DOTs, different states, EPA or EPDs, USEPA, ASHTO, a lot  
18 of different agencies. The 5th Edition actually had two  
19 products that were approved. That would be the  
20 (Inaudible) and the Filtrex product. And Mr. Knight  
21 put up the specs from the Website, but one of the key  
22 things that he should know is that those are minimum  
23 requirements. Stakes can be placed by the designer or

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2 the engineer in different configurations to meet the  
3 site under certain site conditions. It's very often  
4 done. But they are just a minimum requirement. Of  
5 course, we have to have some sort of minimum because if  
6 you don't, the contract will have one every 500 feet.  
7 Also, the size of those plots dictated to a degree a  
8 change in that.

9 This is actually one of the benefits of this  
10 type of generic practice. I'm not saying the Filtrexx  
11 product but the generic practice that a lot of other  
12 manufacturers that make that the stakes do not come  
13 prefabricated with this type of practice. They can be  
14 put in to meet specific conditions by the designer or  
15 contractor. I think a lot of the manufacturers that  
16 make this type of product have that. That would also  
17 include straw wattles. That would also include separate  
18 retention devices as well.

19 REPRESENTATIVE KNIGHT: Again, I want to  
20 address the committee in response to this. First of  
21 all, there RFP called for specifically going back to the  
22 manufacturer's suggested installation instruction in  
23 your product. I'm going to tell you, if you're going to

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2 do this, if you're going to say that was a minimum, I  
3 guess every other manufacturer out there would like to  
4 come in and say this is our minimum, we'd like to double  
5 it up too. So if we're going to test, apples and  
6 apples, test on apples and apples. We're not going to  
7 let one product double down on its installation. It's  
8 sort of the same thing I guess you'd say if you're  
9 testing the weight load of a 2x4 but you put a 4x4 on  
10 there. The 2x4 may pass or it may not pass, but you  
11 think that 4x4 is going to pass? Yeah. You  
12 overinstalled it. Is that really what the TAC Committee  
13 wanted was to let one product be overinstalled at the  
14 discretion? I don't know whose discretion, because,  
15 again, Georgia Soil and Water set the direction. So,  
16 Ben, I don't know, or Brent, who sent the instructions?

17 MR. DYKES: We did as part of the RFP.

18 REPRESENTATIVE KNIGHT: What were the  
19 instructions? Was it to double up?

20 MR. DYKES: Follow the manufacturer's  
21 recommendation.

22 REPRESENTATIVE KNIGHT: And what were those?

23 MR. DYKES: I don't have them before me.

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2 MR. SPRAGUE: We contacted the manufacturer,  
3 and he told us what to do. That was the recommendation.

4 REPRESENTATIVE KNIGHT: If that were the case  
5 you would have also contacted GDOT and asked for the  
6 same instructions. Okay? Let's do apples and apples.

7 MR. SPRAGUE: You're exactly right.

8 REPRESENTATIVE KNIGHT: You would have  
9 contacted GDOT and said tell me how to install this.  
10 But I will go back to the TAC Committee, and I'm not an  
11 engineer, but if you're going to test this and you're  
12 going to test something to go in our manual which the  
13 industry is going to follow, is the industry going to go  
14 and say I'm going to double up on the number of stakes  
15 put in the product, or are they going to follow the  
16 manual? Okay? Brent gets it. This is about industry  
17 and this is about what the minimum amount is out on our  
18 environment. And that is what they're going to follow.  
19 And so to go down that road of reasoning is very, very  
20 disingenuous when the test showed everybody minimum  
21 standards. If you're going to let somebody double up,  
22 you let everybody double up on the installation of the  
23 product.

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2 MR. DYKES: Thank you, Representative. I  
3 think you've given us a lot of food for thought. And,  
4 Britt, I'll give you one more and then we're going to  
5 move on the agenda.

6 MR. FAUCETTE: There's still an important  
7 distinction here, and that is the generic spec in the  
8 manual and then the product spec that at some point, and  
9 I don't know if this will happen or not, but there was  
10 supposed to be an approved product list which would have  
11 manufacturers. So you'll have basic specs that are  
12 minimum requirements, but as (Inaudible) that can follow  
13 the manufacturer's specifications which may not be  
14 exactly what is generically represented in the manual.  
15 That happens all the time.

16 MR. DYKES: As a public entity the commission  
17 has to represent not one single product, not one single  
18 practice, so Representative, I appreciate you bringing  
19 the information to us today. It's been very helpful I  
20 know to me personally and I'm sure to other people on  
21 the committee also. Is there any other discussion  
22 regarding the presentation we saw?

23 MR. MASTRONARDI: Just to conclude that issue

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2 out, we set a standard based on the installation.

3 That's the take-away. If we set a standard on a 4-foot  
4 spacing, what's the outcome of that? And then I think  
5 that's the salient point of all that is a standard has  
6 been set based upon (Inaudible).

7 MR. DYKES: Thank you. We had broke at Item  
8 4. For the sake of time let's move past Item 4. Ben  
9 Ruzowicz has provided to you today a list of comments to  
10 date. We'll certainly entertain activity from the  
11 commission on the comments to date; however, I know that  
12 you're just receiving -- actually, you've received them  
13 prior to today. If you'd like to discuss any in detail,  
14 we would be glad to do that at this time, as committee  
15 members. That's the packet of information bound in the  
16 black binder clip.

17 MR. MASTRONARDI: The item regarding T Posts,  
18 the pounds per foot, I would encourage that be adopted.  
19 We've found that that still gave sufficient support  
20 (Inaudible). It actually was a conscious decision that  
21 we had to make. Not that (Inaudible) our minimum  
22 practice.

23 MR. DYKES: Any other comments on that item?

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2 That was Item 6 on Page 1.

3 MR. RUZOWICZ: I just want to say something  
4 real quick. In putting this in Excel format, it wasn't  
5 to take out anybody's name; it was just to save space.  
6 You guys received the full comments as were e-mailed to  
7 me through your e-mails, but this was just to try to  
8 save space and paper on some of the shorter ones that  
9 could make sense without having the whole discussion  
10 that goes with it, if there was a discussion that went  
11 on. And then some of them were unanswered questions  
12 from the last Technical Advisory Committee meeting out  
13 of the minutes.

14 MR. PARKER: Marc, with the little bit lighter  
15 posts that you're using now, is it getting anywhere near  
16 a threshold being a weak point in the system?

17 MR. SPRAGUE: No, it's not. Honestly, we've  
18 been doing it, I don't know if it's actually since the  
19 '90s. I would say it's probably been in place since  
20 '05, almost ten years.

21 MR. RUZOWICZ: I know I'm not a Technical  
22 Advisory Committee member, but I wouldn't have a problem  
23 with that specification.

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2 MR. PARKER: I don't think it would change our  
3 result, skew the decisions we've made at all to change  
4 that. I suggest we do as Marc and Ben say and test for  
5 1.15 in lieu of the 1.3 lb.-per-foot stakes.

6 MR. DYKES: Any dissension from committee  
7 members regarding comment 6 to size posts at 1.15 lbs.  
8 per foot? Any discussion? Okay. It's adopted.

9 MR. PARKER: The four previous comments above  
10 that are dealing I believe with just spelling.

11 MR. RUZOWICZ: Yeah, misspelling.

12 MR. PARKER: I'm good with these.

13 MR. RUZOWICZ: I don't have a problem with  
14 going back and changing them.

15 MR. DYKES: Anybody want to disagree with the  
16 correct spelling? There being none, it's adopted.

17 MR. RUZOWICZ: The next one is just a comment.  
18 We don't require that to be done on construction sites,  
19 so I think it's more of an observation, not something  
20 that can be done. But it was a submittal so I didn't  
21 want to not put it on the list.

22 MR. PARKER: I agree with that comment.

23 MR. RUZOWICZ: So just no comment is okay?



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2 MR. MASTRONARDI: No response warranted.

3 MR. RUZOWICZ: Okay. Just wanted to make  
4 sure.

5 MR. RICHARDSON: I would say probably the  
6 easiest thing to do is start at the top and go through.  
7 That way we're not jumping around.

8 MR. DYKES: I think the only one left on Page  
9 1 is regarding skimmers.

10 MR. RUZOWICZ: He was wanting to know how the  
11 reopening of the manual affected the skimmer.

12 MR. RICHARDSON: It's a permit requirement as  
13 of January 1st, 2014 that you have to use that  
14 outstructure that dewateres from the top, so technically  
15 this doesn't affect skimmers. So as of January 1st,  
16 2014 you have to use that. If not, if it's not feasible  
17 to use it, you have to include a written justification  
18 as to why it's not feasible, and then you can use other  
19 options like retrofits, things of that nature.

20 MR. RUZOWICZ: The only other thing that's in  
21 that specification is that it checks to make sure that  
22 it does discharge the amount of water that it says it's  
23 supposed to discharge. That's the only other

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2 requirement that was in there, and there's not even an  
3 approved product list or anything like that. It just  
4 says check your product and this is a test that you  
5 could follow in order to check that product.

6 MR. PARKER: The second question there is does  
7 this delay implementation of the new Green Book  
8 requirements. I guess the answer is it only delays  
9 implementation of a specific Green Book requirement.

10 MR. RUZOWICZ: I think Dewey hit it on the  
11 head when he said it's already a part of the MPDS  
12 permit.

13 MR. MASTRONARDI: I'm not sure actually of the  
14 foundation of the question. I don't know if it's asking  
15 about the suspension of the manual edition, provisions  
16 in the manual. I think we're kind of reading into it.  
17 If Dewey is correct (Inaudible). In terms of a  
18 response, it may be that the response needs to be it  
19 doesn't allow you to deviate from the regulatory  
20 permits.

21 MR. RUZOWICZ: I was just going to refer to  
22 the MPDS permit page number.

23 MR. MASTRONARDI: That's fine.

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2 MR. DYKES: On the back of the legal size page  
3 there are eight additional comments or questions.

4 MR. MORAN: How much do you turn upstream?  
5 How many feet?

6 MR. DYKES: So Bob's question was how many  
7 feet upstream would you turn the product.

8 MR. MASTRONARDI: The check dam is actually a  
9 ditch. I think it's a negligible gain turning it  
10 upstream. The center of the ditch is still the low  
11 point. It's going to (Inaudible).

12 MR. FAUCETTE: I would agree with Marc. I  
13 would argue that if you would do that, that would be  
14 more of a (Inaudible) not really a check dam.

15 MR. RUZOWICZ: So you guys are saying straight  
16 across, leave it like it is.

17 MR. DYKES: The next question related to  
18 construction exits and the location of them.

19 MR. RUZOWICZ: Maybe that's something we could  
20 add a note to make sure that that isn't done on the  
21 detail, to specify that kind of action for  
22 tractor-trailer trucks?

23 MR. BROWN: Based upon the comments for the

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2 construction exit, it just depends on what site you're  
3 looking at. It's going to be based on what site. If  
4 you only have a certain depth of site, you're not going  
5 to be able to wash them down at the construction site.

6 Like have a note in there --

7 MR. RUZOWICZ: That it's not mandatory?

8 MR. BROWN: That it's not mandatory but it --

9 MR. RUZOWICZ: It's a good best management  
10 practice?

11 MR. BROWN: Yes, best management practice if  
12 needed and can be accommodated on that site.

13 MR. DYKES: Good point.

14 MR. PARKER: We could say if the space is  
15 available, and then we could say if it's not available,  
16 for traffic control required, or other means of cleaning  
17 tires?

18 MR. DYKES: Okay. Temporary sediment basins,  
19 a question regarding use of perforated riser pipes in  
20 deference to the EPA's requirements for surface  
21 skimmers, I think we just answered that awhile ago. You  
22 can write an explanation as to why you're not going to  
23 use a skimmer, but in most cases a skimmer is required.

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2 The next question is regarding vertical  
3 perforated pipes and moving that information to another  
4 section. Ben, are you familiar with what they're asking  
5 for there?

6 MR. RUZOWICZ: He's talking about attaching  
7 the skimmer to the vertical pipes. There's a detail in  
8 the manual that shows if you have a temporary structure,  
9 you don't necessarily have to have that vertical pipe;  
10 you could put it straight through the dam. So that  
11 would be something to show them. But with all skimmers  
12 there has to be emergency spillway, so that was one of  
13 the requirements that was out there. And just like the  
14 permit says, it says dewatering from the top, so they  
15 can always write a rationale as to why they can't have a  
16 skimmer and still use the traditional SE 3, any of those  
17 other forms of sediment storage that we already have. I  
18 mean, going off memory, I think this is -- I don't know.  
19 We can contact the guy to make sure that that's what he  
20 is asking, if you want. You guys have all the full  
21 e-mails.

22 MR. DYKES: So the recommendation is what now?

23 MS. JORDAN: It sounds like his question is

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2 whether there should be a separate BMP called out for a  
3 surface skimmer, and possibly he's saying put all that  
4 information in with that (Inaudible).

5 MR. RUZOWICZ: Yes. I think the best thing is  
6 I can write him an e-mail asking him to clarify what he  
7 is saying here, because there is a section for surface  
8 skimmer and there is some talk about it in the SE 3  
9 because there's always been a little bit there. But we  
10 can make sure that that's what he's -- just clarify what  
11 he's specifically asking with the question so we answer  
12 it a hundred percent correctly.

13 MS. JORDAN: I think it would be helpful to  
14 keep the surface skimmer separate. There is a great  
15 deal of information there.

16 MS. RUZOWICZ: Right, yes, because it can be  
17 used on permanent or temporary structures. So I'll  
18 contact him, John Spots.

19 MR. DYKES: The next question or comment  
20 regarding our numbering system for figures, looks like  
21 we skipped from 10 to 12, so I think that's editing,  
22 easily handled.

23 The next item is one which y'all have probably

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2 discussed about before today, and that's regarding the  
3 67 cubic yards per acre of sediment storage for soils  
4 below the Piedmont.

5 MR. MASTRONARDI: I don't think you can  
6 entertain that based on the regulation. That's a  
7 minimum established by EPA, approved by EPD.

8 MR. RICHARDSON: Marc is correct. It's permit  
9 required. It does state in the permit that if you can't  
10 meet the 67 cubic yards, again, you have to do a written  
11 justification why you can't and basically have a  
12 statement stating that the BMPs that are installed will  
13 control erosion and prevent sedimentation.

14 MR. RUZOWICZ: So permit requirement would be  
15 the logical answer for that one?

16 MR. RICHARDSON: Yes.

17 MS. JORDAN: However, my understanding of what  
18 the question gets at is how many acres you calculate.  
19 There's a big difference between how to calculate 67  
20 cubic yards per disturbed acre versus per acre of  
21 drainage basin. You can have a huge drainage basin come  
22 into a relatively small disturbed area, and if you've  
23 got to retain sediment for that huge drainage basin, and

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2 I've seen this, you might have to disturb more area than  
3 you would have otherwise just to get the whole drainage  
4 basin. I was looking back, and on the SE 2 it does say  
5 drainage basin. On the SE 3 it doesn't really call it  
6 out and there's an example calculation, but it doesn't  
7 give you clarification because in that particular  
8 example the drainage basin (Inaudible) as disturbed  
9 area, so you can't really tell by the example what's  
10 intended. But I think this definitely has some merit  
11 because (Inaudible), Because in south Georgia you've got  
12 such slow relief (Inaudible).

13 MR. RUZOWICZ: I know the permit states that  
14 it's 67 cubic yards per acre drained unless you can  
15 route that area around your project. So you could have  
16 a larger area, and as long as you bypass that water  
17 through or around your site, then you don't have to  
18 account for it.

19 MR. MASTRONARDI: The permit also allows you  
20 to justify why you cannot install the (Inaudible). So  
21 even if it is more intrusive to install the sediment  
22 basin, we've had (Inaudible) consideration from EPD to  
23 not do so.



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2 MR. RICHARDSON: Again, all you have to do is  
3 make sure, like Marc said, do a written justification.

4 MR. DYKES: Next question or comment is  
5 regarding consideration of testing two rows of Type C  
6 silt fence, and did we do any testing on the two. To my  
7 knowledge we did not?

8 MR. RUZOWICZ: Right. At the meetings we  
9 talked about that, but price was talked about as an  
10 issue, so in order to keep price down, they decided  
11 let's just test one and do more replicates than do  
12 additional rows behind it to drive the price up.

13 MR. FAUCETTE: The commission still required  
14 in the 6th Edition two rows in certain places.

15 MR. RUZOWICZ: Along sensitive areas.

16 MR. DYKES: The last comment on the summary  
17 sheet is regarding the scientific basis for selecting  
18 the point .03 P Factor as the criteria for products and  
19 the scientific basis for such a number. We had some  
20 discussion earlier today about the ratio, how that is  
21 determined. Would you like for a different answer to be  
22 given to that?

23 MR. RUZOWICZ: Do you want me to say -- so

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2 they want to know how we came up with the .03 as the  
3 minimum P Factor number, from what I'm looking at here.  
4 So that was just the lowest performing BMP that we had  
5 besides straw bales. We weren't trying to cut anybody's  
6 specific product out. We were just trying to make a  
7 minimum number.

8 MR. BROWN: I think based upon it being a  
9 minimum requirement or a minimum result from the  
10 testing, it should be adopted.

11 MR. RUZOWICZ: Right. This is just how we  
12 came up with it. I'm sure we're going to have more  
13 discussion about these tests after you guys go back and  
14 look at the videos and stuff like that. I was just  
15 trying to show, you know, how we got the .03 and the  
16 .045. And then the other number came up because it was  
17 basically right in the middle of all the products that  
18 we did, and the group felt that since we already had a  
19 Type C, we needed to have something for sensitive areas  
20 as well to be kind of equivalent to that. So they set  
21 it right in the middle.

22 MR. DYKES: Attached to that summary sheet are  
23 three other documents, maybe four, containing comments.

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2 Due to the nature of time I would entertain either  
3 moving to the next public comment period, or if you all  
4 want to go through these comments, we'll be glad to do  
5 that now. These are comments also that have been  
6 submitted in letter form and we have not summarized. Is  
7 there interest in going through the letter form comments  
8 at this time?

9 MR. MASTRONARDI: I would rather suspend that  
10 and actually circle back.

11 MR. DYKES: Sensing no dissension, I think  
12 there's agreement.

13 MR. MASTRONARDI: I don't mean to put you in a  
14 difficult spot, but we have all heard an awful lot of  
15 information today. There was a question on the table at  
16 one point regarding third-party analysis.

17 MR. DYKES: Absolutely.

18 MR. MASTRONARDI: Is that question still a  
19 valid question? Do you want to in your capacity --  
20 certainly I'm not suggesting what you do, but do you  
21 want to table that issue?

22 MR. DYKES: I'm open to comments from the  
23 Technical Committee and advisers on how you would like

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2 to proceed. I'm open.

3 MR. MASTRONARDI: Since you've asked, I would  
4 strongly recommend that there be some consideration to  
5 providing your board with a resolution addressing the  
6 timetable as well as addressing -- when I say timetable  
7 I mean in terms of implementing the changes. I don't  
8 want to throw the baby out with the bath water, but  
9 there's a lot of issues. And quite frankly, simply  
10 because I often have to represent the department in  
11 legal matters, I wouldn't want the commission to  
12 consider what you heard today almost in terms of -- put  
13 it this way: Could you defend that? Would you be  
14 willing as the agency under that challenge to adopt  
15 what's in place? If that challenge were to be something  
16 that was a real probability, would you go forward? I  
17 would rather say that it would be prudent as a panel,  
18 especially with a lot of new members, that we actually  
19 slow down and digest what we've heard. That's my  
20 recommendation.

21 MR. DYKES: Comments from the committee?

22 MR. MORAN: I concur with what he said.

23 MR. BROWN: Based upon the information that we

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2 got today and those TAC videos, I don't think it would  
3 be worth deciding if a third party should review or not  
4 at this time.

5 MR. MORAN: Have you looked at a third party?  
6 Who would that be?

7 MR. DYKES: We've looked at other folks in the  
8 academic world that have done erosion control testing,  
9 and private entities that do the same thing. We have  
10 not contracted. We just want to know was it even a  
11 possibility.

12 MR. HAMIL: I concur with that.

13 MR. DYKES: Yes, sir. So we are discussing a  
14 slow-down and looking at making a recommendation, or the  
15 committee is, making a recommendation for a timetable  
16 implementing the changes to the commission board. We  
17 need to talk about a time table.

18 MR. MASTRONARDI: I honestly think it's a  
19 two-fold issue in terms of you're either going to accept  
20 everything in place, and that takes time to determine  
21 based on the things I've heard, or actually discard  
22 that. I don't want to take that conversation on today.  
23 I think it needs to be posed this way: That you look at

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2 the 5th Edition as being the governing manual. A lot, a  
3 real amount of time went into this. It took years and  
4 years. If it's nine months, it's nine months. But come  
5 January 1 the EPD is going to rely on whatever is  
6 effective on January 1. If we rush into a decision to  
7 say Mr. Sprague has adequately explained it all away and  
8 come January 1 it's inaccurate and on the heels of that  
9 there's challenges, we are all very publicly exposed to  
10 that. I would rather not do that.

11 MR. RUZOWICZ: I have an idea. There's been a  
12 lot of stuff brought up about bits and pieces of it, but  
13 there's also a lot of other good stuff that does come  
14 into play and keep up with our new permits. We've heard  
15 a lot of stuff on silt fence. We've heard a lot of  
16 stuff on check dams, all that kind of stuff. Maybe  
17 that's the stuff we can continue to take a closer look  
18 at, but those other BMPs that people have been  
19 certifying as alternatives that got in there, and  
20 generic BMPs or the skimmers that people are using all  
21 the time, you know, and the updates to the other parts  
22 of the manual that give people reference information  
23 such as Websites and where to go to get information,

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2 that stuff be still used, but all this other stuff  
3 that's been brought into question, slow it down like  
4 you're saying. Let's take a look at it and let's make  
5 sure we get it a hundred percent right. Nobody wants to  
6 put out something that's wrong.

7 I don't feel that we have a bad product, but I  
8 do think that some things can be changed from what we  
9 have seen, and that nobody has physically, with the  
10 check dam testing, from what I've seen, nobody has  
11 physically attacked the test itself. They've attacked  
12 the installation of the product but not how the test is  
13 being run. I haven't heard that that specifically is a  
14 bad test itself, but I do agree let's take a look at it,  
15 let's go back. But I don't think the test itself is a  
16 bad thing, and I don't think using the clay soils that  
17 we've used in these tests is either a bad thing because  
18 that's a majority of what we have in Georgia. And we  
19 also proved that that was cheaper to test with because  
20 the setup and dry time was cheaper. We didn't know that  
21 when we started, but the industry might like that down  
22 the line.

23 MR. MASTRONARDI: I would think in terms of

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2 subsequent meetings you could tackle those in bites.

3 What I'm driving at is, if you've got two board meetings  
4 left for this year for the commission, there's an action  
5 to be taken for it (Inaudible). Whatever the path  
6 forward is in terms of sticking with Edition 5, 6 with  
7 several items omitted, whatever that is, I think that's  
8 what needs to be decided. You know the schedule.

9 MR. DYKES: I think irregardless of what the  
10 committee decides today, the manual will be discussed at  
11 the next two meetings of the commission. If this  
12 committee would like to make a recommendation, now is  
13 one opportunity to do so. If you would like to make  
14 your recommendation known, now would be the time to do  
15 so. It will be a discussion item and has been for most  
16 of the month. It will continue to be. But if this  
17 committee wants to make a formal recommendation, this  
18 would be the time to do it.

19 MR. MASTRONARDI: For clarification as well,  
20 you're establishing that in your capacity, if the  
21 committee recommends something that you can't support,  
22 the commission will.

23 MR. DYKES: I don't make the decision. I



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2 bring recommendations from the committee to the  
3 Conservation Commission Board. If I do or don't support  
4 it, I'll make that known to the board.

5 MR. MASTRONARDI: Okay. I didn't know the  
6 weight of the responsibility on this group as it relates  
7 to that decision.

8 MR. DYKES: This group was appointed to  
9 provide recommendations on anything related to the  
10 manual by the Soil and Water Commission Board. So if  
11 this is a matter you'd like to take up, then certainly  
12 it's a good discussion and should be acted upon today,  
13 if the committee so chooses.

14 MR. MASTRONARDI: Can someone succinctly tell  
15 me what's governing today?

16 MR. DYKES: The 5th and 6th Edition are both  
17 being used. There's no approved product list other than  
18 the DOT qualified products list.

19 MR. RUZOWICZ: And what was previously in the  
20 existing edition of the manual.

21 MR. BEHREND: We would like to see that  
22 clarified because we hear confusion, and that is what  
23 our director has mentioned in letters. We'd really like

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2 to see that clarified.

3 MR. DYKES: So if this committee would like to  
4 find some type of clarifying resolution or  
5 recommendation, I should say, then certainly that would  
6 be carried to the commission board.

7 MR. MASTRONARDI: I would recommend that we  
8 return to the 5th Edition manual for a period of not  
9 less than nine months, or let me say this: September  
10 1st, 2015.

11 MS. JORDAN: My preference would be stay with  
12 the 6th Edition minus the BMPs that we're discussing  
13 right now.

14 MR. HAMIL: It's my understanding we only have  
15 three board members left, and one of them's term is  
16 being expired in about two years, and one is being  
17 expired in one year, and one other, his term is still  
18 going on. How is that going to affect what the  
19 situation is? Because I don't know the status if  
20 somebody's term has expired.

21 MR. DYKES: All state commission board members  
22 serve until their successor is named. So all existing  
23 board members, even if their term has expired, continue

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2 to serve with full authority. So we will have a board  
3 meeting in early November and we'll have a meeting in  
4 December. It will take a quorum of three, which is all  
5 the members we have at this time, to have a meeting or  
6 to take any action.

7 MR. HAMIL: What if the Governor decides to  
8 replace two of them?

9 MR. DYKES: Then he can do that, absolutely,  
10 but we'll still have a quorum.

11 MR. HAMIL: And they won't know anything about  
12 what's going on.

13 MR. DYKES: Absolutely. Then they are a  
14 sovereign board just like any other board and they have  
15 to make their decision based on the knowledge that they  
16 have.

17 REPRESENTATIVE KNIGHT: One other question.

18 MR. DYKES: Yes, sir.

19 REPRESENTATIVE KNIGHT: It may be relevant  
20 here. You're talking about the 6th Edition, combination  
21 5th and 6th Edition. I want to bring back to the  
22 attention of the committee my understanding is that  
23 NTPEP has adopted these testing methods. Director, you

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2 and I had a conversation early in the week. One of the  
3 things, and I don't know if Ben would care to comment,  
4 but has NTPEP been told of what's going on here? Ben,  
5 apparently you made a phone call, according to Brent.

6 MR. RUZOWICZ: I've always e-mailed them the  
7 revised testing material as well.

8 REPRESENTATIVE KNIGHT: What was your comment?  
9 In other words, this industry, according to the minutes  
10 from the last meeting, said, hey, we would request that  
11 NTPEP be informed of the dilemma or the issues that may  
12 be public. I guess I'm asking what specifically, since  
13 there is nothing on record, did you maybe inform the  
14 committee of that?

15 MR. RUZOWICZ: Yes. I sent the National  
16 Transportation Product Evaluation Committee, I sent them  
17 the revised testing, and then after today they were also  
18 wanting all the information from the reports provided by  
19 Joel and the studies that were done by Wesley's test as  
20 well.

21 REPRESENTATIVE KNIGHT: Guys, I say this as a  
22 legislator, and all of us are on the same team, Georgia  
23 team, what decision that y'all make also will reflect as

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2 to -- since this has been promoted and advanced by  
3 Georgia, and what you've heard today brings enough pause  
4 and concern, how is that going to make us look? And  
5 that I think goes back to the manual and the question of  
6 are we going to keep something we've got concerns about,  
7 maybe indeed have errors in the output from it? I think  
8 it's a policy decision.

9 When you guys go home, the issue is going to  
10 be, the headlines in the paper, you know, we implemented  
11 something and had everybody follow us down the road, and  
12 it wasn't the road that we thought we were going down.  
13 That's where there is a lot of concern at my level in  
14 how do we continue to protect Georgia, its reputation.  
15 And I know all of y'all in here, what we care about, and  
16 that's making sure that Georgia is environmentally  
17 protected. So I want to caution y'all on that.

18 The other thing, and I'll bring one more point  
19 to the table, reading the manuscript from last time,  
20 talking about just the silt fence and the check dam, I  
21 believe there was a comment, and I don't know if it was  
22 ever answered by Mr. Sprague, but one of the pictures in  
23 that slide apparently, and I looked at the video, looked

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2 like there was Bentonite that was used on, was it inlet?  
3 Was it inlet testing? It was outside of the slope and  
4 the check dam. It was another one of the devices. If I  
5 remember that conversation, reading that manuscript  
6 right, it wasn't supposed to be there. That brings into  
7 question from my point of view are there other similar  
8 type issues that need to be looked at other than what  
9 has been focused on right now, which is the slope and  
10 the check dam. That's just a thought for the committee.  
11 Y'all know more about this than I do.

12 MR. MORAN: To follow up, this is an e-mail I  
13 got September 30th from ASHTO and NTPEP. I don't know  
14 if you got it or not. I'll just read it real quick. It  
15 says: "To all interested parties, beginning October  
16 1st --" which is past "-- 2014, NTPEP will begin  
17 accepting applications for large-scale sediment  
18 retention device testing through the Erosion Control  
19 Products Technical Committee. This testing will include  
20 the following methods," and they go on to ASTM 7351,  
21 ASTM 7208, ASTM D5141. I was surprised, though, that TM  
22 11340, perimeter performance testing, is on the e-mail.  
23 I don't know how much it cost, but I was real surprised

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2 to see it on there because it's not an ASTM test yet.

3 Everything else I've ever done in the 23 years I've been  
4 doing this is ASTM driven. And if this is still in  
5 committee, I was surprised to see it on here.

6 REPRESENTATIVE KNIGHT: And I guess when I  
7 looked on the Internet and I'm learning about this  
8 board, that you go through this committee, and obviously  
9 Ben Ruzowicz is a friend of the committee, Joel Sprague  
10 is, your colleagues at TRI are friends of the committee,  
11 and obviously the DOT members that are there. And  
12 again, guys, no matter where you stand down here, you  
13 need to make sure that up here you're protecting Georgia  
14 and how we look and what we're doing, and that's the  
15 policy decision. You need to think about it as you go  
16 through these questions that you are now asking  
17 yourself, because it will have ramifications even come  
18 January or February of next year.

19 MR. DYKES: So Mr. Mastronardi has made a  
20 suggestion that a recommendation come from this  
21 committee regarding returning to the 5th Edition for a  
22 period up to nine months, which would be September 1st,  
23 2015.

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2 MR. MASTRONARDI: Can I amend that?

3 MR. DYKES: Absolutely.

4 MR. MASTRONARDI: What I was thinking about is  
5 in terms of the EPD, because it's a January 1st date by  
6 code, and I would suggest it be January 1st of 2016.

7 MS. FULLARD: As a regulator, I would not want  
8 to go back to the 5th Edition simply because it is  
9 lining up. Most of the BMPs, as Britt pointed out  
10 earlier, they are all the same. It's just these testing  
11 methods and to get the alternative products on a list.  
12 They are allowed in Gwinnett County, alternative BMPS.  
13 We use them all the time. We encourage them in  
14 sensitive areas. We encourage designer flexibility.  
15 And I feel like if we go back to the 5th Edition, then  
16 as a reviewer it's going to be difficult for us to  
17 implement the new changes because there's no standard.  
18 They are going to say in the 5th Edition there's no  
19 standard for a skimmer; in the new edition there's no  
20 standard for nonsensitive or sensitive areas. I like  
21 Betty Jean's suggestion to go with the 6th Edition with  
22 the areas of concern being removed or some notation that  
23 these are under review. But just to throw it out, I



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2 feel like really we are throwing out the baby with the  
3 bath water. It's very difficult. Reviewers, when  
4 you're sitting across the table from an engineer, and we  
5 had this conversation before, it's difficult to  
6 implement erosion control because it's not a one product  
7 fits all. It's very subjective. So we need to make  
8 sure that we're in line with the EPD. And this is  
9 moving toward it. The 5th Edition, the data on it, we  
10 are not moving with EPD permits. The 6th Edition does.  
11 So it will be my recommendation to the rest of the  
12 committee to go with the 6th Edition, and again, the  
13 areas that need to be reviewed, open it up.

14 MR. MASTRONARDI: Are you aware that you have  
15 the ability to exceed the commission's minimum  
16 standards? That's what the 5th Edition, that's what any  
17 edition represents, the minimum. So if Gwinnett County  
18 chose to adopt a practice for Gwinnett County, they  
19 could. Would that serve your purposes?

20 MS. FULLARD: Marc, I do know that. I've been  
21 17 years, so I understand. Again, in the economic times  
22 that we live in, it's very difficult for me to say or  
23 Gwinnett County to say we're going to be more stringent.

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2 If I've got the skimmer and the details of the skimmer,  
3 how that needs to be put in, then I've got a guide.  
4 I've got some way to at least -- even the staff that  
5 works for me. It's not going to be proprietary. It's  
6 actually a practice. And that's just where I'm coming  
7 from. I understand I can be more stringent and I can go  
8 to the 6th Edition, which is what we've done. And  
9 still, if someone wants to use the 5th Edition, we go  
10 back to the 5th Edition, but again, it's the 5th or the  
11 6th, the 6th or the 5th. So that would be my  
12 recommendation.

13 MR. FAUCETTE: I think this is one of the  
14 reasons that the board decided for this interim period  
15 to use either one while we sort of figure some of this  
16 out. Making the decision to go back to the 5th Edition  
17 solely, that manual was written probably almost 20 years  
18 ago. A lot of stuff has happened in this industry in  
19 that time period, and I know a lot of folks probably in  
20 this room have not only been part of that or working  
21 with the commission to try to make updates, and this is  
22 the first time that's really happened. And I think part  
23 of the goal here is to put emphasis more on performance,

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2 which is good, but I think if we're going to go back to  
3 5th Edition, I think that actually brings more  
4 confusion. I think that throws out a lot of good stuff  
5 that's happened. So my recommendation to the board is  
6 keep it where it is right now until we figure this out.

7 MR. BROWN: I've been on all three sides of  
8 the table. I've been in the government, I've been on  
9 the engineering, and I've been on the contractors side.  
10 If we go back to the 5th Edition, it's going to confuse  
11 everyone even more on the ones that are actually  
12 installing these products. I bid projects every day. I  
13 look at designs on projects every day. If I'm going  
14 backwards on something, we might as well just go  
15 backwards on everything. It's not worth it to go back,  
16 and just to continue to go forward and progress. I  
17 agree with Betty Jean. Leave out the items that have  
18 discrepancies and that we have questions about but  
19 continue with the 6th Edition.

20 MR. MASTRONARDI: I guess my question then  
21 would be what are the items we're talking about.

22 MR. RUZOWICZ: I would say silt fence and  
23 check dams are definitely two of the ones that were

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2 definitely brought up.

3 MR. MASTRONARDI: Don't they constitute the  
4 substantive changes between the 5th and the 6th.

5 MR. RUZOWICZ: No. There are a lot of other  
6 BMPs. We are not just talking Chapter 6. I mean,  
7 there's chapters, all the other chapters and appendixes.  
8 I mean, they are all updated to have the new information  
9 which goes back to the right Websites and stuff. I  
10 mean, whatever you guys decide. There might be other  
11 BMPs that you guys might want to take into consideration  
12 as well besides just those two, but I was just throwing  
13 that out there as the two that had already come up from  
14 what Mr. Knight had brought up. I know from what we  
15 have seen on plan reviews and stuff like that, the  
16 skimmers is definitely a huge deal, and a lot of the  
17 people in the industry are using that information and  
18 have good comments about that.

19 MR. MASTRONARDI: We currently are  
20 (Inaudible), but I'm making the suggestion that GDOT  
21 does (Inaudible). That's not my suggestion. I'm  
22 looking for simplicity. If there is a way to simply do  
23 it that satisfies the state regulators, I'm not privy to

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2 what their recommendation was, then that should be fully  
3 considered.

4 MS. FULLARD: We also have a whole section on  
5 the slopes to building that had been updated, which is  
6 huge for our regulators, because it does give  
7 alternative. And as long as it's meeting a standard,  
8 that's -- I don't want to go back to (Inaudible). I  
9 want to stay with (Inaudible).

10 MR. RUZOWICZ: Nobody has questioned that.  
11 That's been a full ASTM for a long time, and IHDA has  
12 adopted it as far as the slope stabilization.

13 MR. HAMIL: The total testing needs to be left  
14 out subject to Mr. Knights' presentation.

15 MR. FAUCETTE: Just to give a little bit of  
16 historic perspective, I think, one of the reasons that  
17 we've gotten to this point with the 6th Edition is that  
18 I think the commission hasn't had an efficient,  
19 effective way to evaluate new practices and to be able  
20 to implement them into a new manual. (Inaudible) field  
21 tested by the DOT (Inaudible) you can't standardize  
22 that. So I think with this process there's finally a  
23 path forward where they can do that in a nonsubjective

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2 manner and approve these test methods. And if we're not  
3 going to use them, then I think we need to give the  
4 commission a tool or a way to be able to do that. If  
5 we're basically talking about taking that away, we're  
6 taking away their ability, we're hamstringing them to be  
7 able to fairly and effectively and objectively evaluate  
8 between practices and what can and can't be used. I  
9 know at the end of the day there's a lot of different  
10 stuff to review and say whether it's approved or not.  
11 We need to have a way where they can do that in an  
12 effective, efficient, objective manner, and it hasn't  
13 happened until we've come up with this.

14 MR. HAMIL: I still like my idea. Let the DOT  
15 develop a test and let the local people do the testing.  
16 It will be cheaper to set up until such time we come to  
17 agreement. I think the DOT is very smart and I think  
18 they can come up with a simple test that won't cost too  
19 much until we come up with something different. Sorry  
20 about that, Marc.

21 MR. MASTRONARDI: I take it as a compliment.

22 MR. PARKER: I'm in line with Adena and Betty  
23 Jean as far as a partial manual, but I have the same

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2 kind of questions that we are talking about in my head  
3 of, you know, which BMPs are we going to leave out, and  
4 are we going to say that they are -- sediment barriers,  
5 if we leave that out of the new edition right now, are  
6 we saying we are going to just accept the 5th Edition  
7 sediment barriers for the check dams, or are we saying  
8 we're just going to accept the 5th Edition check dams?  
9 So in other words, is that what we would revert to?

10 MS. JORDAN: My understanding is right now we  
11 are working on both manuals until the end of this year,  
12 calendar end.

13 MR. DYKES: The official code of Georgia says  
14 the manual in print on January 1 is the manual that  
15 holds reference for the entire calendar year. So if  
16 there's any reset, it occurs at January 1 of each  
17 calendar year.

18 MS. JORDAN: Is there a way to say we continue  
19 what we're currently doing looking at both manuals for  
20 maybe another year to give us more time to sort through  
21 other issues?

22 MR. DYKES: You could, yes.

23 MR. FAUCETTE: The way I understand that is

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2 that's a decision of the board. If they made that for  
3 this calendar year, they could or could not make it for  
4 the next one.

5 MR. DYKES: What you would be doing today as  
6 the committee is making a recommendation to the  
7 commission.

8 MR. PARKER: I don't know that my question was  
9 answered. Would we revert back to the 5th Edition BMPs  
10 if we were to do a combination of the manuals?

11 MR. DYKES: Yeah. In simpler terms, you'd  
12 have to fill in the blank. You couldn't take silt  
13 fencing out without putting something back in there.  
14 That would be one option.

15 MS. JORDAN: You might have a skimmer on your  
16 site or you might go with ABC silt fence, kind of put it  
17 together.

18 MR. PARKER: And then selecting which BMPs to  
19 leave out, you know, I definitely heard questions about  
20 the checks, the barriers, potentially the inlet traps.

21 MR. RUZOWICZ: That would be another good one.

22 MR. MASTRONARDI: Let me propose a suggestion  
23 here. Consider this: Eliminate the performance



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2 standards.

3 MR. PARKER: Which is only one more BMP, the  
4 slope.

5 MR. RUZOWICZ: Both slope and then channel  
6 stabilization. You guys went with the existing ASTM  
7 6460 and then existing ASTM 6459. So even though there  
8 wasn't any testing done by us, you guys used the  
9 existing data that was already out there, which is how  
10 you guys came up with the C Factor. Who was it with the  
11 NRCS? She has made a recommendation to make the minimum  
12 C Factor whatever tackified straw was, because if  
13 something couldn't do as good as tackified straw, then  
14 it shouldn't be used on the slopes. So we looked around  
15 and instead of having to run the test, we found somebody  
16 that had already run it, and that's how we came up with  
17 that C Factor number, was tackified straw to that slope  
18 using that ASTM. And then anything that did better than  
19 that would be able to be used in that application  
20 whether it was matting and blanket or whether it was  
21 anything else, you know, hydraulically applied product,  
22 because we've had a lot of people with a lot of big  
23 projects come to us and say we want to use hydraulically

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2 applied, do we have to go through the alternative BMP  
3 process. We've always told them yes because they're not  
4 (Inaudible).

5 MR. MASTRONARDI: I think you could  
6 (Inaudible) the performance factor and recognizing the  
7 QPI for that period.

8 MR. FAUCETTE: Just for clarification, are you  
9 saying keep the specifications but get rid of the C  
10 Factor?

11 MR. MASTRONARDI: I think that's what's in  
12 question, because if we're not eliminating products,  
13 which I think is the issue with the 6th -- I'm not sure.  
14 Yeah, I think that's what's in the 6th Edition. The  
15 biggest reason we're here and had this protracted  
16 meeting is the standards established that have made it,  
17 it has in fact impacted some folks in the manufacturing  
18 industry. We need to visit that, but in terms of as a  
19 sock, a check dam, could it be a check dam, if the  
20 commission and this panel says it's a check dam, it's a  
21 check dam. And in terms of establishing when other  
22 socks were needed, again, that goes back to when you  
23 think of this decision, think about it from the

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2 commission's standpoint. If the manual allows for  
3 alternative BMPs, then you have to have a yardstick to  
4 apply. If it's not these which you've been using and  
5 been considering, then what would it be? That's a great  
6 issue, I think, for you guys to carry forward. Again, I  
7 made a very simple recommendation. I understand it's  
8 not popular with all but it's very simple.  
9 Alternatively EPD has made a suggestion. Glenn, do you  
10 know what it is well enough to speak to it?

11 MR. BEHREND: I believe it's the next page in  
12 the comments.

13 MR. RUZOWICZ: Which one?

14 MR. BEHREND: Manual for (Inaudible).

15 MR. RUZOWICZ: I wasn't sure if that came from  
16 you guys or where exactly that came from.

17 MR. MASTRONARDI: Again, I think my concern  
18 would be if you keep the 6th open and you have it to use  
19 as a yardstick, you essentially have no controls at all  
20 if you're going to evaluate alternative BMPs, or else  
21 you revert back to the practices of evaluating BMPs  
22 prior to the TAC being impaneled at all.

23 MR. DYKES: I'm not sure the commission will

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2 react on any type of new BMP during the transition  
3 period. I can't speak for them but I'll just say if  
4 this committee or anything has been recognized as a  
5 standard, how can you hit a target that doesn't exist?  
6 I think the bigger issue is what happens January 1 with  
7 the manual. I'm not as concerned as a director about  
8 alternative practices. I am concerned and I don't want  
9 to misstate but my bigger concern is what this committee  
10 would recommend as of January 1 for a manual. That's my  
11 bigger concern.

12 MR. FAUCETTE: Marc has a good point. I think  
13 that if we are going to go with the 6th Edition and move  
14 forward with that but we are not going to have the  
15 testing or performance standards, we have to recommend  
16 to the board a way that the commission can then evaluate  
17 new practices and products. I think that was the reason  
18 for putting this together to some degree, and so I think  
19 we can't leave them hamstrung with no way to do this in  
20 the future. We have to give them at least a  
21 recommendation for them to be able to move forward. I  
22 know a lot of this falls on Ben and Gary to get all  
23 kinds of products and practices (Inaudible). You have

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2 to give them a fair way to go.

3 MR. DYKES: From a timing standpoint, not  
4 today's time but timing in general, the next commission  
5 board meeting is November 6th. If the committee at this  
6 time, meaning your committee, is not prepared to make a  
7 recommendation or to move forward on a recommendation,  
8 there is time to schedule a meeting between now and  
9 prior to November 6. If this committee would like to  
10 deliberate sometime in the next week or so and come back  
11 and reconvene, that certainly could be done. I'm not  
12 saying you're not prepared today. I'm just saying  
13 you're not pushed that you have to make a recommendation  
14 today for a commission board meeting tomorrow. That's  
15 not the case.

16 MS. JORDAN: Will that November meeting be the  
17 only time the board meets between now and the end of the  
18 year?

19 MR. DYKES: As it stands now, there would be a  
20 November 6 meeting and there would be a meeting the  
21 third Thursday of December, as it stands now.

22 MR. PARKER: If we move to the 6th Edition but  
23 leave out the BMPs that have performance factors,

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2 performance thresholds, can't we just use the same  
3 method that was used during the 5th Edition submitting  
4 alternate BMPs?

5 MR. FAUCETTE: Just my opinion but I think  
6 it's very inefficient and a somewhat subjective process.  
7 I feel like that process was created as a stopgap until  
8 something more efficient could be done. Because what  
9 that means is a whole list of materials need to be  
10 submitted (Inaudible) information on design testing  
11 specifications for every project, every plan  
12 (Inaudible). I think that's a lot of extra work for  
13 plan reviewers. I think the staff needs to have the  
14 ability to be able to do this, to be able to put these  
15 new practices on a list or have them in the manual and  
16 not have to wait 20 years to be able to do that process.

17 MR. PARKER: But they can't generate a TPL  
18 list without having positive data to base it on.

19 MR. FAUCETTE: You're right. I think that's  
20 part of what Marc is also saying, is that if this  
21 process has given that ability to put stuff on that  
22 list, so if we don't go with this process discussing or  
23 the P Factor, you know, you have to come up with another

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2 one that we can all agree on and comfortably use that  
3 they can then put stuff on that list in a somewhat  
4 efficient, objective manner.

5 MR. PARKER: But I don't think we're talking  
6 about coming up with another method. I think we're just  
7 coming up with stepping back and looking one more time  
8 at what we have looked at.

9 MR. FAUCETTE: I agree. I think there was  
10 some discussion about going back to the 5th Edition  
11 altogether and getting rid of everything in the 6th  
12 Edition was part of my response. But I agree with you.

13 MR. MASTRONARDI: I'd just like to remind the  
14 TAC that the NPDES permit allows for alternative BMPs to  
15 be proposed by a designer, but what you won't have is a  
16 clearinghouse with the commission. You can instead  
17 still have a one-off ability by the regulator to use an  
18 alternate BMP. It doesn't slam the door to say you  
19 can't come up with another mouse trap.

20 MR. FAUCETTE: I think that alternative BMP  
21 rule has been a good kind of stopgap measure to sort of  
22 bridge the 5th and 6th Editions. What it does is it  
23 intentionally creates a very subjective process with

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2 testing, research, design, specification. It gives a  
3 lot of information that's requested on, I think there's  
4 four or five things on that list, that then needs to be  
5 reviewed on a case-by-case basis. And then not really  
6 evaluate apples and apples. I'm in favor of giving  
7 designers leeway to do what they need to do, but I think  
8 some designers probably don't know how to evaluate  
9 certain things, certain research projects or testing,  
10 and is this a fair test, where did this come from, and  
11 then so everybody sort of doing that across the state.  
12 I like the idea of sort of centralizing that and having  
13 experts making that decision. I'm not disparaging  
14 designers. There are some great ones out there and that  
15 are sitting at this table that do know how to evaluate,  
16 but there's others that I think are looking for somebody  
17 to help me with this decision.

18 MR. DYKES: Is there any recommendation from  
19 the committee specifically about the January 1 manual?  
20 Mr. Mastronardi made a couple of comments, and then Ms.  
21 Jordan, and certainly Adena has. Is there any consensus  
22 on the recommendation at this point?

23 MR. FAUCETTE: My recommendation for the board



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2 is to continue what they agreed at their previous  
3 meeting and be able to use both until we can make a  
4 recommendation to them as to which changes are more  
5 informative.

6 MR. RUZOWICZ: I just think the TAC should  
7 take some more time to think about it and come back and  
8 have another meeting.

9 MR. BROWN: I agree with Ben.

10 MR. RUZOWICZ: There's a lot of information to  
11 look at, and I don't necessarily think that going back  
12 and looking at some of the performance testing we did,  
13 if not all of it, is necessarily a bad thing. There are  
14 other options for sediment barrier testing, and if you  
15 go back and look at the minutes, those options were  
16 presented at the meeting in the very beginning. So  
17 there are other options. You know what I'm saying? It  
18 doesn't mean necessarily that what we did is wrong or --  
19 you know, there was some very good stuff put in that  
20 video, but like you said, we did do replicates of three  
21 and there is a lot of stuff to look at. Realistically  
22 that's a lot of information to digest for this committee  
23 between now and November, December, and it needs to be

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2 looked at carefully. So I feel that there's BMPs that  
3 can go back.

4 MS. JORDAN: I agree.

5 MR. SPRAGUE: May I share just one thought? I  
6 think as it relates to the testing, you have the test  
7 method and then you have the recommendation what to do  
8 with the results. And I think they really are two  
9 different issues. Is there a proposal on different  
10 tests? Is there a proposal on using the results  
11 differently? The P Factor, is it too tight to satisfy  
12 some folks? And so the answer is maybe just to make it  
13 a little looser. There's that engineering judgment  
14 that's been made, and then there's the test method  
15 that's been done. Just an observation.

16 REPRESENTATIVE HOUSTON: May I make a  
17 suggestion? We've got some people back here that are  
18 authorities on this subject. Could we have some public  
19 comment? We've been sitting here four and a half hours.

20 MR. DYKES: Yes, ma'am, we're moving to public  
21 comment. Any consensus today?

22 MR. HAMIL: I'm hungry.

23 MR. DYKES: I think there is consensus there,

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2 Mr. Hamil. I can guarantee you that. I'm hearing  
3 varying opinions and some consensus, but I don't hear  
4 majority consensus. I say we do move at this point to  
5 public comment and allow those that have signed up for  
6 public comment to do so. At the end of public comment  
7 we will schedule a meeting, with my hopes, prior to the  
8 November commission board meeting such that we can move  
9 forward with some of the items we talked about then and  
10 certainly have time to peruse the information that's  
11 been provided.

12 So we have a list of folks. I'll tell you  
13 what, let's take a 30-minute break. At 3:00 we'll  
14 reconvene here for public comment.

15 (Break)

16 MR. DYKES: To start off public comment, Item  
17 6 as listed on the agenda, I'm just going to call from  
18 the list as presented. Representative Houston.

19 REPRESENTATIVE HOUSTON: I just had one or two  
20 comments. They kept on talking about real-life  
21 situations and real-life things, and then I hear you say  
22 that you had six inches of rainfall in 20 minutes. This  
23 is supposed to be a test in Georgia. Could you tell me

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2 where in Georgia and when they had a six-inch rainfall  
3 in 20 minutes? That's just as a layperson. I wonder if  
4 this is going to be about Georgia, and I think this test  
5 was done for Georgia. And I think one thing, we cannot  
6 have the appearance of any conflict of interest, and I  
7 think we've got to go overboard to avoid a conflict of  
8 interest. And I was surprised to see one person there  
9 when his fabric was tested. Were they notified that  
10 their fabric was going to be tested at that time? And  
11 was everybody notified that they could come and view  
12 their fabric being tested? If we are going to do one  
13 thing for one person, let's do it for all. Let's be  
14 completely fair and completely open about this. And we  
15 cannot give any appearance of conflict of interest.

16 And the next thing, I was just appalled at  
17 some of these videos, and just a layperson like me, I'm  
18 not an engineer, but when I saw the rainfall up there  
19 where it rained the night before and they pointed out  
20 the rainfall the night before, and they went on and  
21 tested it like it didn't rain, I would think testing had  
22 to be done the same way. And you talk about moisture.  
23 Even somebody like me could tell it was a lot more

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2 moisture in one of these tests than the other. You've  
3 got to be fair. I just think we need to treat everybody  
4 fair and have fair testing. And from what I've seen, it  
5 doesn't look like it's been fair. That's all I've got  
6 say.

7 Now you tell me where the rainfall is six  
8 inches in Georgia in 20 minutes.

9 MR. SPRAGUE: That's really a good question.  
10 This is a standard that's used for erosion and now for  
11 sediment control so people can test their products and  
12 those be used all over so that --

13 REPRESENTATIVE HOUSTON: Not all over. I  
14 thought this was for Georgia.

15 MR. SPRAGUE: But the manufacturers don't want  
16 to have to pay just for Georgia and just for Alabama,  
17 and just --

18 REPRESENTATIVE HOUSTON: So this manual is for  
19 everybody in the United States?

20 MR. SPRAGUE: Standardized testing is. So  
21 then they'll interpret things, but --

22 REPRESENTATIVE HOUSTON: But I don't  
23 understand why we're putting state dollars in this thing

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2 if it's for everybody else. And I think we did put  
3 state money in here, even if it was compensatory.

4 MR. SPRAGUE: We'll just follow the procedure.  
5 In terms of the videos, once again, for anybody who has  
6 done large-scale testing, they'll understand. It's like  
7 being on a construction site.

8 REPRESENTATIVE HOUSTON: Well, at a  
9 construction site --

10 MR. SPRAGUE: And it's messy, it's dirty,  
11 stuff goes on, yeah, it does. So that's a little bit I  
12 guess surprising that --

13 REPRESENTATIVE HOUSTON: Well, it was  
14 surprising to me that you said you had that much  
15 moisture in the soil yet you had rain up there one day  
16 and went on and tested. That's surprising to me.

17 MR. SPRAGUE: But you know Georgia soil is  
18 clay and it doesn't absorb. So if it gets a light rain  
19 the night before, not a big deal. It doesn't absorb.  
20 The moisture --

21 REPRESENTATIVE HOUSTON: I thought you said  
22 you tested the soil to see if it had so much moisture.

23 MR. SPRAGUE: Right before the test. That's

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2 right. So if it rains the night before --

3 REPRESENTATIVE HOUSTON: You could see this  
4 thing right before testing, and it just didn't make  
5 sense. I'm sorry. I'm just a layperson. I'm not an  
6 engineer. It just didn't look fair, and I just want  
7 everybody treated fairly. Thank you.

8 MR. SPRAGUE: And I agree with you as well.  
9 We do our darndest to, number one, follow the scope of  
10 services, which we did religiously, to follow the test  
11 method, which we did as best --

12 REPRESENTATIVE HOUSTON: When you see  
13 pictures, it just doesn't look like you did.

14 MR. SPRAGUE: Especially when they're taken  
15 excerptively and not given a chance to respond to each  
16 one. That was unfortunate.

17 REPRESENTATIVE HOUSTON: And then I saw the  
18 wind up there blowing. You said you took wind into  
19 consideration. I don't know if you were on the test  
20 site a lot or you just had this man doing it that was on  
21 the picture.

22 MR. SPRAGUE: I am the director, so I am  
23 responsible.

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2 REPRESENTATIVE HOUSTON: Thank you.

3 MR. DYKES: Thank you, Representative. Next  
4 is Mr. Brad McCoy.

5 MR. McCOY: I'm Brad McCoy with Gro-Green  
6 Solutions. As a manufacturer, I'm going to go back in  
7 time kind of when everything got pulled down the first  
8 time, the approved list. We had an incident that kind  
9 of came to mind with a regulator from Gwinnett County.  
10 We had multiple incidences with distributors of ours.  
11 As you can imagine, Gwinnett County is a pretty  
12 substantial hotbed for our types of products. We had  
13 multiple instances where we had folks that sell our  
14 product for us up there called by their customers and  
15 told they couldn't use the C-POP product. Our concern  
16 from the manufacturer's standpoint is, with the melee  
17 that went on with the list that went out, what kind of  
18 revenue we could have seen lost during that time when we  
19 really didn't know what we had on the street as far as  
20 the testing information. I guess my question may be for  
21 the individual from Gwinnett County. Has that been  
22 resolved? We haven't heard much from it here in the  
23 last month but we did have a couple instances where



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2 people were even asked to remove the C-POP material and

3 told they could use a Type A instead of the C-POP.

4 MS. FULLARD: The situation arose when you

5 have RDPs, residential drainage plan, submitted to

6 Gwinnett County, and along with those details RDPs we

7 required the details for silt fencing. So if we had

8 Type C silt fencing with the wire back and steel posts,

9 it's not a contractor's choice. That's the designer's

10 choice. So when we had the inspectors out in the field

11 go inspect the site, the C-POP material had been placed.

12 If the RDPs were revised and they clipped a note on

13 there that says you're going to use alternative

14 products, the C-POP detail is on the details, we've

15 never had a problem with it. It's just going out in the

16 field and placing or installing a BMP that is not

17 approved for the residential drainage plan.

18 MR. McCOY: So it was a Gwinnett County thing.

19 What do you think about that?

20 MS. FULLARD: I'm not sure I --

21 REPRESENTATIVE KNIGHT: Excuse me for

22 interrupting. I've heard this from different counties,

23 not only this county. I've been told by people that we

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2 had either planned to use it and we're being told now by  
3 the regulatory authority that the 6th Edition is in  
4 place and now you can't use the old 5th Edition, which  
5 in many cases was the silt fence. Do you understand  
6 what I'm saying? We're saying that the confusion was or  
7 what has been an issue is that instead of saying you  
8 could use the 6th Edition or 5th Edition, and you  
9 correct me if I'm wrong, that the cord only got out,  
10 there was confusion or the regulators said no, we're  
11 going to stick with 6th edition. And under the 6th  
12 Edition the C test was not allowed because it did not  
13 meet the BMP testing standards of the P Factor.

14 I'll tell you that is of grave concern to me,  
15 especially if we've got confusion out there because of  
16 this, because of small businesses and Georgia businesses  
17 that were denied something, not because it was the right  
18 thing to do but because somebody chose to say we're only  
19 going to recognize the 6th Edition, where under law and  
20 under what Director Dykes has said and this committee  
21 has said that you've got the 5th and 6th Edition. You  
22 see where I'm rolling with this? There's multiple  
23 instances around the state of that happening, or at

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2 least what I've been told.

3 MS. FULLARD: Well, it's not in Gwinnett  
4 County. Once C-POP was recognized, then you had the  
5 detail according to the manufacturer's recommendation.  
6 If there's a failure, then it's up to the owner to  
7 replace. So whatever product is specified on the  
8 residential drainage plan, that's what the inspector is  
9 going to inspect out in the field. If there's something  
10 different, he's going to tell them to remove it and  
11 place what's on the plan. So, like I said, I've been in  
12 Gwinnett County 17 years and we've always said the  
13 alternative products are accepted. It's just we have to  
14 have the specs. If it's not on the specs, the product  
15 will be asked to be removed.

16 REPRESENTATIVE KNIGHT: You said alternative,  
17 meaning alternative BMP or?

18 MS. FULLARD: C-POP --

19 REPRESENTATIVE KNIGHT: Let me ask, the 5th  
20 Edition, is that an alternative product or is that a  
21 recognized product?

22 MS. FULLARD: It's not a recognized product in  
23 the 5th Edition.

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2 REPRESENTATIVE KNIGHT: It is. I thought  
3 under the 5th Edition that Georgia Soil and Water  
4 recognizes the GDOT QPL.

5 MS. FULLARD: Right, but Gwinnett County does  
6 not allow the wooden posts on the C-POP, so we use that  
7 as a (Inaudible). It's still used.

8 MR. PARKER: I just want to point out that the  
9 NPDES permit does require that construction drawings  
10 match what's on the ground. So a government authority  
11 can't approve installation of something that's in  
12 variance from the approved plan.

13 FROM THE FLOOR: But on that note, you can  
14 redline it in the field and not --

15 MR. DYKES: We're not going to be able to call  
16 on you. In order to keep the integrity of the record we  
17 kind of need to stick where we're at. Anything else,  
18 Mr. McCoy?

19 MR. McCOY: No. I'm done.

20 MR. DYKES: Thank you for your comments. Mr.  
21 Robert Page.

22 MR. PAGE: I'm done.

23 MR. DYKES: Mr. Donald Davis.

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2 MR. DAVIS: I've got just really one thing  
3 directed toward the DOT. Has any of these products,  
4 like the silt sock or Silt-Saver, have they ever been  
5 tested by y'all before?

6 MR. MASTRONARDI: Yes, they have.

7 MR. DAVIS: What's the results?

8 MR. MASTRONARDI: Compost filter sock for  
9 sediment barrier, we will allow it if it's staked every  
10 two feet. It sits in our specification as an alternate.

11 MR. DAVIS: My question is did it work. Did  
12 it ever fail?

13 MS. MASTRONARDI: We had a few failures. We  
14 did some site testing and it was not accepted in the  
15 site test.

16 MR. DAVIS: What about Silt-Saver?

17 MR. MASTRONARDI: Silt-Saver, because it is a  
18 nonwoven fabric, we don't approve it. It actually --

19 MR. DAVIS: But it just passed its test.

20 MR. MASTRONARDI: The commission recognizes  
21 it.

22 MR. RUZOWICZ: I'd like to say something, to  
23 be clear. Silt-Saver is I think recognized as the dome

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2 structure, and I think what you're talking about is

3 BRSF, the specific silt fence. Is that correct?

4 MR. DAVIS: Is that what you guys tested?

5 MR. RUZOWICZ: I just want to make sure that

6 you're talking about the same thing.

7 MR. MASTRONARDI: We tested the Silt-Saver

8 product with the dome ST2 inlet cover, and it has been

9 an allowed alternative. As a silt fence for sediment

10 barrier, we don't approve the product because actually

11 after a couple uses we find it clogs and retains water

12 and it can threaten to get water into our roadways. On

13 the primary definition of the ASTM spec governing this

14 it's meant to be a woven product.

15 MR. DAVIS: And that was tested, what, five

16 years ago?

17 MR. MASTRONARDI: Quite some time ago.

18 MR. DAVIS: I had a similar thing. I had a

19 catastrophic failure. If I'm not mistaken, it did get

20 out on the highway. None of that stuff -- didn't any of

21 the TAC members know that?

22 MR. FAUCETTE: I am familiar with some of the

23 testing that Georgia DOT has done. We have actually

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2 worked together on some of this. And I don't know that  
3 the TAC knows a lot of this history. I think that's  
4 partly how a lot of this (Inaudible) we'd have to start  
5 again. Choosing location has always been kind of  
6 difficult. (Inaudible) standard test method. That's  
7 one of the reasons why this committee wanted to have a  
8 standardized test so we could avoid some of that. I do  
9 know that they've had a separate (Inaudible) for quite  
10 some time. I don't know that all the practices that  
11 we're talking about have gone through previous to now  
12 some standard test method.

13 MR. DAVIS: If I'm not mistaken, the TAC, did  
14 you guys just pass -- I mean, doesn't it pass the C  
15 Factor test where you guys are accepting it?

16 MR. FAUCETTE: What's the question?

17 MR. DAVIS: Didn't it just pass y'all's test,  
18 the C Factor test?

19 MR. RUZOWICZ: The Silt-Saver wasn't tested.  
20 Our goal was to set benchmark standards, not to cut any  
21 BMP that was already being used.

22 MR. DAVIS: But when it's our gold test and  
23 you set it up to get tested --

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2 MR. RUZOWICZ: It failed the test as far as  
3 what the DOT was looking at in their application. It  
4 was tested in another scenario under this test, and we  
5 weren't looking --

6 MR. DAVIS: Are y'all going to test it again  
7 before you --

8 MR. RUZOWICZ: And then the other thing is the  
9 Technical Advisory Committee did take into account the  
10 negative effects of ponding. There's stuff in the  
11 write-up that says that if there is detrimental or  
12 negative effects as far as ponding where somebody could  
13 hydroplane or something like that, an engineer can write  
14 a rationale. And there's even that statement, I believe  
15 in the NPDES permits, to allow them to not put that BMP  
16 in so that they don't cause that effect. And I know  
17 it's in the write-up for inlet protection, and that's  
18 why they have the blocks behind it so that when it does  
19 overflow it can go down into those drains as well and  
20 hopefully stop that.

21 MR. DAVID: I didn't see it. And what did you  
22 say? The silt sock, did it pass before, two years ago,  
23 five years ago?



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2 MR. MASTRONARDI: I think our specification is  
3 a compost filter log that can be used by a contractor I  
4 believe in place of Type B silt fence. But we tried  
5 compost filter sock, was it for a check dam?

6 FROM THE FLOOR: Sediment control.

7 (Inaudible conversation among several  
8 participants.

9 MR. DAVIS: The last meeting I said along with  
10 (Inaudible) testing I would suggest using a different  
11 county or whatever to put some of these products that we  
12 want to try to accept on projects now so you can go back  
13 six months later, or have somebody monitor them to see  
14 if they really do work or don't.

15 MR. RUZOWICZ: I'd just like to say we've had  
16 a lot of complaints from industry people as well as far  
17 as the testing not being the same, whether it's  
18 installed in north Georgia, whether that's through a DOT  
19 test or somebody else, whether it's in north Georgia or  
20 south Georgia. So that's why the group wanted to come  
21 back to one thing so that everybody was trying to do the  
22 same.

23 MR. MASTRONARDI: I think what will still

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2 happen, if nothing else were to change, the department  
3 would still hold many of the same views in terms of  
4 safety. So regardless if the commission approved an  
5 item, we would recognize that those be more stringent.  
6 And our measure is safety in terms of that.

7 MR. DYKES: Thank you, Mr. Davis, for your  
8 comments. Next on the list is Mr. Roger Singleton.  
9 He's not here. Next on the list is Mr. Larry Booth.

10 MR. BOOTH: Larry Booth with Willacoochee  
11 Industrial Fabrics. I want to again thank Georgia Soil  
12 and Water for allowing us to be a part of this process.  
13 We have had a lot of input in all of the meetings and  
14 talking with Joel earlier during the break. And as I've  
15 said earlier, Joel is a very knowledgeable person in  
16 testing. TRI is a very knowledgeable organization.  
17 Joel had stated earlier that mistakes were not made in  
18 the testing but mistakes were made in the calculations.  
19 I don't know that I fully agree with that because I've  
20 viewed all the videos. He says that because this is  
21 groundbreaking technology, that's why they have issues,  
22 technical issues, blowouts and things like this, and  
23 they've done their very best. With that in mind, if

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2 that is the case, why would the Technical Advisory  
3 Committee and Georgia Soil and Water make wholesale  
4 changes in the Green Book based on a new test method and  
5 new procedures the first time it was done? I think that  
6 was a serious error in judgment there on something as  
7 new as this was.

8 Now, WK 11340 is not approved by ASTM, as had  
9 been stated several times in this meeting and previous  
10 meetings. That test method was chosen by the Technical  
11 Advisory Committee for this testing. When you are doing  
12 new testing, groundbreaking testing, large-sale testing  
13 that's going to impact not only the manufacturers in our  
14 state but also impact the environment in our state, then  
15 I think you should be using, before you start the  
16 testing, you should determine that the test method you  
17 are going to use is a test method that is reproducible  
18 and also repeatable. Now, the reason ASTM has not  
19 adopted 11340, and it's been in contention for almost 12  
20 years. Willacoochee Industrial Fabrics is a member of  
21 ASTM, and at the last meeting the question of  
22 repeatability, which Mr. Sprague stated was the ability  
23 of a lab or a manufacturer to test this product over and

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2 over and get the same results. That's repeatability.  
3 Reproducibility is the ability of me to use that same  
4 test method and Joel to use that same test method, and  
5 any other lab to use that same test method, with the  
6 same product and get repeatable results. Neither of  
7 those have been established for this test method. So  
8 the choice of that test method for this groundbreaking  
9 work was in my opinion an error. They should have  
10 waited. They should have chosen a different test method  
11 which had already been approved, or they should have  
12 waited until the reproducibility/repeatability had been  
13 established on this test.

14 Also, the use of Bentonite was permitted per  
15 the contract, it was stated earlier. Now, I refer back  
16 to the minutes of the September 10th meeting where  
17 Mr. Singleton made the statement: "I believe the test  
18 was to test the product itself for flow and efficiency,  
19 not the installation method. In order to test the  
20 product itself you have to close off any escape of water  
21 passing through or under in order to test the flow  
22 throughout the product and the efficiency that passes  
23 through or over the product." Mr. Sprague's response:

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2 "And I guess I'd have to disagree with you on that one.  
3 The goal here was to run and install performance tests,  
4 so the installation is supposed to represent how it's  
5 put in in the field and to do it in accordance with the  
6 procedure."

7 Now, earlier today Mr. Parker made the  
8 statement also that we were trying to evaluate  
9 real-world performance. Dr. Faucette made a statement  
10 later on that they wanted to replicate field conditions.  
11 Now, real-world performance and field conditions do not  
12 permit the use of Bentonite to control the product from  
13 undermining this, which is one of the points that we  
14 have made in previous meetings, that if you're looking  
15 for real-world conditions, it's fine to use Bentonite  
16 and to seal the edges, but in order to determine  
17 real-world conditions you cannot seal off the underpart  
18 of that, because if there is a product that will allow  
19 undermining, that needs to be noted and established in  
20 the testing in order for it to give you real testing  
21 performance.

22 I think the stakeholders have had the  
23 opportunity to demonstrate a lot of issues to bring up

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2 for the committee to consider, and as has been alluded  
3 to by Mr. Knight over here and other people, the  
4 decisions that you make are far reaching. They are not  
5 just Georgia decisions that affect Georgia and the soil  
6 and water and environment in Georgia. The industry is  
7 looking at these tests from Georgia Soil and Water and  
8 they have used these tests, and companies that have  
9 products tested in this test have promoted the use of  
10 their products based on this test method, even though  
11 there were significant issues that have been raised  
12 there.

13 I'd like to go back to a question that Ben  
14 answered earlier where Representative Knight asked if  
15 NTPEP had been provided with all of the test data that  
16 was done in this test and in the revision of that test  
17 data, and he stated that they had been. I did not  
18 understand whether or not NTPEP had been provided with  
19 all of the issues that were brought up at the last  
20 meeting that were published in the minutes of the  
21 meeting and stated clearly, that there could be some  
22 potential issues. Was NTPEP provided with all of that  
23 information also?

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2 MR. DYKES: I'll answer that, Mr. Booth. No,  
3 they have not received the public document, the written  
4 document. They received communication from us by phone  
5 and possibly an e-mail, but they will, following today's  
6 meeting, receive all communication, all issues as  
7 brought up through the transcript and other issues that  
8 have been brought to light.

9 MR. BOOTH: I think that is critical, because,  
10 as was stated in a letter that was read earlier by one  
11 of the Technical Advisory Committee members, and I don't  
12 remember who read the letter, that said they are moving  
13 forward, I received the notice also that ASTM is going  
14 to move forward with testing and the WK 11340 was one of  
15 the test methods that's being used. Now, I don't  
16 believe that if they had knowledge of all the issues  
17 that have been brought up, that they would have taken  
18 that step. So I think it's imperative they are made  
19 aware of that to be able to use that in their  
20 decision-making process.

21 MR. DYKES: Yes, sir. It's a public document.

22 MR. RUZOWICZ: Do we have a copy of the video  
23 so I could send that too?

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2 MR. DYKES: We have videos too. They'll get a  
3 copy of the videos and everything. I don't think we  
4 have a copy of the presentation from the Representative  
5 but we have all the videos that would encompass that.

6 MR. RUZOWICZ: Can I get that too to send  
7 along?

8 REPRESENTATIVE KNIGHT: I'll let you send that  
9 along. I'm surprised you haven't done your homework  
10 already, but, yeah, you can copy off my sheet.

11 MR. BOOTH: In addition to that, there was a  
12 lot of information disseminated to a large group of  
13 people in the erosion control industry, 70,000 members.  
14 E-mails went out with all the glorious promoting this  
15 testing and all the test results. Now, those members do  
16 not have access to these issues either, and I think that  
17 with the same vigor that it was promoted to them  
18 initially, we should use the same vigor in ensuring that  
19 they are kept abreast of it up-to-date on the current  
20 issues that exist.

21 MR. DYKES: We will do a much better job.

22 MR. BOOTH: Thank you very much.

23 MR. DYKES: Next on the agenda, Ms. Kelli



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2 Davis.

3 MS. DAVIS: I'd like to thank you all for  
4 allowing us to come and speak. I've listened to  
5 everything this morning, and I've heard on multiple  
6 occasions where people said it would be confusing if we  
7 went back to the 5th Edition. I understand why you said  
8 that, because you've done so much hard work on this.  
9 But let me share something with you from a  
10 manufacturer's standpoint. In this 6th Edition -- and I  
11 deal with silt fence all the time, but I deal with other  
12 products as well. Underneath the silt fence type  
13 sensitive, are you aware that the TRI testing that was  
14 done for this particular thing was not done as per your  
15 schematic here? It says type sensitive will have 4-foot  
16 max spacing and a woven wire fence. That is not how it  
17 was tested. That is not per Georgia DOT. Georgia DOT  
18 says Type C will have wire fencing and 4-foot spacing.  
19 So if you flip on over to the silt fence type  
20 nonsensitive, it says 6-foot on centers, no wire  
21 fencing.

22 I think after we're in our tenth month people  
23 have been looking at this 6th Edition, and I don't know,

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2 as far as regulations or regulators go out there on the  
3 jobsite, if you go out on a jobsite and you see this  
4 configuration, is it going to be passed or is it going  
5 to be failed? That's confusing, I mean, just as an  
6 installer. I don't install. Our company does not  
7 install, but just think about this. If this is law and  
8 for the last ten months people have been out there  
9 trying to install this product as per the 6th Edition,  
10 they would fail. This is not actual installation  
11 methods for Georgia DOT, and it is not what was tested  
12 in the TRI test results. And that's all I have to say.  
13 Thank you very much.

14 MR. DYKES: Thank you, Ms. Davis. Next on the  
15 sign-up sheet is Mr. Wayne Seabolt.

16 MR. SEABOLT: I appreciate it. I'll try to  
17 make this short and brief because I know that you guys  
18 are ready to go. But mine is altogether a different  
19 scenario here. I'm in the compost filter sock business,  
20 and by the way, Natural Growth's compost filter sock was  
21 not the one that was tested by the DOT. It was turned  
22 down. It was the Filtrexx product.

23 Three or four years ago -- I'm in the soil

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2 enhancement compost business as a result of that I got  
3 into the compost filter sock business. And Dr. Britt  
4 Faucette and I go a long way back, even back when he was  
5 in school. And I wanted to get approved as an  
6 alternative BMP, and I got the information. It's a  
7 four-step criteria that you have to go by to be approved  
8 as an alternative BMP. I submitted all this information  
9 to Georgia Water and Soil Conservation, and I was told  
10 that I had met the criteria. There's a four-step  
11 criteria here, one-page summary, detailing why the  
12 alternative BMP is equivalent, on and on and on,  
13 documented side-by-side testing, BMP; number three,  
14 proof that the alternative BMP was previously installed;  
15 and number four, all specifications including design  
16 requirements and the procedure for the proper  
17 installation and so forth.

18 Well, I met all that criteria, and as a result  
19 of that I started marketing my product. Well, in my  
20 conversations with Georgia Water and Soil Conservation  
21 there was an approved products list that was on their  
22 Website and it had Filtrexx approved A and B. Now, my  
23 point was and I was told that I had been approved for A,

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2 B, and C. And my question was why can I not be put on  
3 the approved products list. I was told if we put you on  
4 the approved products list, it's going to appear that  
5 you're just approved for A and B, and you've been  
6 approved for A, B, and C. I was actually told you've  
7 been approved for A, B, and C, and Filtrex has not.

8 Now, the problem I run into is that time after  
9 time -- and you talk about getting into your pocket, and  
10 you're talking about affecting your business, time after  
11 time I will have people that will contact me and they  
12 want to use my product, and yet they are told that I'm  
13 not on the approved products list. But they can call  
14 Georgia Water and Soil Conservation and through a  
15 discussion with Georgia Water and Soil Conservation it  
16 seems that for some reason most of the time up until  
17 recently I am allowed to be used. Well, one particular  
18 engineering company in Atlanta, a very big company, I'm  
19 not going to call their name, they wanted to use our  
20 product on all the renovations on the new McDonald's.  
21 They were told that we weren't on the approved products  
22 list. Well, I said call Georgia Water and Soil  
23 Conservation. They didn't want to go to that trouble,

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2 so as a result of that, my product has not been allowed  
3 to be used because I'm not on the approved products  
4 list.

5 My question is, if I met the criteria for the  
6 alternative BMP, what does it take to get on the  
7 approved products list? I was told that there has not  
8 been a new product put on the approved products list in  
9 the last seven years. I was also told that a company --  
10 and I don't mind. Britt and I go a long way back so I  
11 can just be open. I was also told that Filtrex was on  
12 the approved products list. And I said, "How did  
13 Filtrex get on the approved products list?"

14 "I don't know."

15 But yet here's the real catcher: When all  
16 this testing through TRI and everything came down, I was  
17 never contacted to even remotely present my product to  
18 have it tested. Filtrex was. Now, according to the  
19 documentation here, Natural Growth compost logs was a  
20 Georgia Soil and Water Conservation approved alternative  
21 BMP for the DOT Type A, B, and C silt fence; however,  
22 the contract stated that there was only one product  
23 approved and therefore they were left, my company was

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2 left out of the process. My point is that if I went to  
3 the trouble and I hired engineers and I went to the  
4 trouble and I have met the criteria as an alternative  
5 BMP and the other compost filter sock company has not,  
6 how were they tested or how were they approached to be  
7 tested and my company was not? I don't have \$19,500 to  
8 pay to have my three products tested. That's the  
9 9-inch, the 12-inch, and the 18-inch sock. It's more  
10 than that now. I'm beginning to get interested in  
11 24-inch socks. But my point is that my competitor,  
12 Filtrexx, they had their testing done and they didn't  
13 have to pay a penny. But I've been told if you're going  
14 to have your testing done, you're going to have to pay  
15 \$6,500, and if you pay that money and you don't pass  
16 that test, then you forked out \$6,500 for nothing.

17 So all I'm asking, I need some clarification.  
18 If nothing else, I appeal, I plead, to the Technical  
19 Advisory Committee or somebody to give me direct  
20 clarification in regards to what it's going to take for  
21 me, Natural Growth, to be on the same level playing  
22 field. I think it's unfair. I think that my company  
23 was left out of the loop. Anybody have any questions

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2 for me, please?

3 MR. RUZOWICZ: I'd like to say something.

4 Awhile back Mr. Seabolt came to us with some

5 documentation. He asked me to look at it. He said does

6 this meet the criteria set forth in this. I looked at

7 it, and, yes, it looked like it would meet the criteria.

8 But the way that the alternative BMP is written up is

9 that it's written up on a case-by-case basis. So each

10 local initiative authority has the ability to approve

11 that BMP. If they want to deny it, they have to come to

12 the EPD or the Georgia Soil and Water. And in those

13 e-mails back to him I told him it has to be done on a

14 case-by-case basis.

15 And just recently there was one that came up

16 to where the local initiative authority called it into

17 effect, and the question-and-answer sheet on that

18 alternative BMP sheet says, "Does an alternative BMP

19 have to go back through the review process if it wasn't

20 already on the plans?" And that had been answered yes.

21 So that was my answer, that, yes, it had to back through

22 the alternative BMP process. This was a process that

23 was developed by the commission and the EPD with the

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2 last round of NPDES permits, not the recent ones that  
3 just went through, but the ones prior to that, five  
4 years before that, so I think you're talking seven years  
5 ago when this did take affect. And that was per the  
6 NPDES permits. It was written into those permits.

7 So I don't have the ability to sit there and  
8 say yes, this is approved on every single site. I was  
9 just looking at it saying yes, it looks like it's all  
10 there; if you're submitting to them, it should be the  
11 right information if the local initiative authority does  
12 choose to approve it as a BMP.

13 MR. SEABOLT: The documentation that I  
14 presented has got Georgia Soil and Water Conservation  
15 Guidance Document for Alternative BMPs. Now, this was  
16 not just an arbitrary thing that I gave to you. I may  
17 be misinterpreting what you're saying, but you seem to  
18 be implying that I just presented some documentation to  
19 you. I went by this documentation right here called  
20 Guidance Document for Alternative BMP. I also got an  
21 e-mail: "Mr. Seabolt, the BMP you're proposing would  
22 fall under a compost filter sock. Otherwise you could  
23 use this information you have acquired and certify it as



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2 an alternative BMP through the alternative BMP process."  
3 The other one I got, 1/14/13: "Mr. Seabolt, once an  
4 alternative BMP has been approved by an LIA, local  
5 initiative authority, it can be used once the fees and  
6 the notice of intent are sent in. If an alternative BMP  
7 is used in an area where there is no LIA and the plans  
8 are submitted to the EPD, then you may start 14 days  
9 after submittal."

10 This is the information I'm getting, and all  
11 I'm saying is that I just want to be on the same -- for  
12 an example, and I don't want to put you on the spot, but  
13 say in Gwinnett County you wanted to use my compost  
14 filter sock, Natural Growth, and you looked on the  
15 approved products list and I was not on there, what  
16 would your decision be?

17 MS. FULLARD: It would be for you to fill out  
18 the alternative BMP forms in Gwinnett County and we  
19 would allow it.

20 MR. RUZOWICZ: And that's what I said in that  
21 e-mail is that you have to apply to the LIA. The reason  
22 I said the EPD is because in some areas there is not an  
23 LIA and it would go to EPD. EPD does not necessarily

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2 approve or deny plans but they do -- they don't  
3 necessarily approve or deny plans, but after 14 days you  
4 can start your construction. So after starting that,  
5 EPD would either then let you know if you did or didn't  
6 meet it. And if you don't hear anything, then you just  
7 assume that it is okay.

8 MR. SEABOLT: Then why was not my company --  
9 because Dr. Faucette and I had a conversation. He and I  
10 badger each other. We had a conversation, and I said,  
11 "You've never met the criteria to be approved as an  
12 alternative BMP." He said, "Yes, I have --" We were  
13 kidding with each other "-- because of the articles I  
14 wrote." I said, "You can't write articles and be  
15 approved as an alternative BMP." My point is that when  
16 this testing was set up, why was I not contacted and  
17 given an opportunity to have the testing done when I am  
18 the only company in the history that I know of of  
19 Georgia Water and Soil Conservation that was ever  
20 approved, compost filter socks, as an alternative BMP?  
21 I was never contacted. I was never even given the  
22 opportunity to do this, but yet Mr. Faucette's company  
23 was.

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2 MR. RUZOWICZ: I mean, before I became this  
3 position they were already on the list. I'm sure if I  
4 go back and look, I'm going to find documentation and  
5 stuff that was submitted to us, however that got there.  
6 But the reason it got used was because it was already on  
7 the approved list.

8 MR. SEABOLT: I know I'm taking too much of  
9 y'all's time.

10 REPRESENTATIVE KNIGHT: This is a procedural  
11 question. I want to ask the director about this. If  
12 you've got a procedure within Georgia Soil and Water  
13 that says if you can apply to be an approved alternative  
14 BMP and you meet those four criteria, and you're telling  
15 me you met it, and I haven't seen the documentation, and  
16 you're telling me that Filtrex either has or hadn't, I  
17 don't know, but it's an approved procedure, if you met  
18 every one of those procedures, then why would that not  
19 be sent for board approval to be put on the qualified  
20 list and one wouldn't? Why? If your procedures are  
21 equal and treating everyone equal, and all being equal,  
22 everybody has followed that four-process step, why would  
23 it not have gotten an equal treatment that another

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2 product would have? And I'll ask you this, Ben: Have  
3 you had conversations where you are approved for A, B,  
4 and C, but I don't want to put it on there because  
5 somebody may misunderstand it? That's been a question  
6 that's been eating me because this constituent has come  
7 in here forever.

8 MR. DYKES: To go to your question,  
9 Representative, as far as alternate BMP, very confusing  
10 subject so I'll try to do my best to explain it. The  
11 Filtrex product prior to the grant that we've been  
12 discussing all day today, prior to the testing that  
13 we've discussed today, the commission board was  
14 petitioned at random times throughout the year prior to  
15 that about getting new products into the current, at  
16 that time would have been the 5th Edition of the manual.  
17 At that time the commission board said if you could  
18 prove the product you had, whatever it was --

19 REPRESENTATIVE KNIGHT: Those four things.

20 MR. DYKES: Right. And that you provided  
21 that, the board would consider that and the board would  
22 vote to put it in the 5th Edition. Filtrex did that  
23 and was placed in the 5th Edition. Mr. Seabolt, when he

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2 approached us, my understanding was, it was after the  
3 board of the commission received the grant to do the  
4 testing. The commission board -- what was the date, Mr.  
5 Seabolt? Because I don't know the date.

6 MR. SEABOLT: How long ago was it that you  
7 received the grant? I think, Ben, that I submitted this  
8 to you three or four years ago.

9 MR. RUZOWICZ: I don't know.

10 MR. DYKES: We've had the grant between three  
11 and a half and four years.

12 MR. SEABOLT: Of course, this was never  
13 mentioned to me.

14 MR. DYKES: March of 2010, from my  
15 recollection, is when the grant started that started the  
16 reformed ATAC, different than this committee, and we  
17 started down a road that led to the testing we talked  
18 about today. My understanding of what Mr. Seabolt's  
19 product is -- and I'm not passing judgment on his  
20 product. It may be the grandest thing ever created.

21 MR. SEABOLT: It is.

22 MR. DYKES: Is that that time line from the  
23 time the board officially received that grant and we

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2 started forward, the board suspended accepting any  
3 products. We have a stack in the office of products  
4 like Mr. Seabolt's. I don't mean compost filter socks.  
5 I mean erosion products that would dearly love to be in  
6 the Green Book, but they are not in there, including Mr.  
7 Seabolt.

8 REPRESENTATIVE KNIGHT: Mr. Director, we can  
9 solve this. Why don't you go back and look back and  
10 find the documentation and trace it back once and for  
11 all, and maybe get back with Mr. Seabolt and the TAC  
12 Committee regarding this issue.

13 MR. DYKES: Sure. We'll be glad to do that.  
14 Anything else? Britt?

15 MR. FAUCETTE: To give a little bit of  
16 historical context to this too, I'm very sympathetic. I  
17 feel sorry for Wayne Seabolt. I think his story  
18 actually represents what is wrong with the 5th Edition,  
19 quite honestly. And a lot of other folks have been in  
20 your position, and that is trying to come to the  
21 commission to say can you evaluate and approve hopefully  
22 this product. And there hasn't been a consistent,  
23 equitable, objective way to do that. I don't know the

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2 time line either, and I'm not even part of that, but I  
3 do know in the history of the commission they've  
4 approved two products historically, and this goes back  
5 years ago. One of them is the Filtrexx product and one  
6 of them is the BRSF. I think this predates Ben but I  
7 don't really know that for sure. That said, the way  
8 that I understand it, the board allowed those to be part  
9 of the 5th Edition. Somebody correct me if I'm wrong.

10 What Wayne and I think a lot of other folks  
11 have gone through is the alternative BMP rule which are  
12 these four criteria that have to be reviewed on a  
13 case-by-case basis. Unfortunately, the way I understand  
14 it, Wayne's product is not part of the 5th Edition,  
15 unfortunately, and it has to be reviewed on a  
16 case-by-case-by-case basis, which is a lot of work for  
17 the designer, for the plan reviewer. And I think  
18 honestly that's the problem with the alternative BMP  
19 rule. I said earlier that I thought it was an okay  
20 stopgap between the 5th and the 6th Edition, and it's  
21 helped in this process, but it hasn't helped in my  
22 opinion enough. I think you should have an avenue to be  
23 able to be included in the 6th Edition. And this

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2 process that we have created with the 6th Edition  
3 actually now allows folks like him to be able to have a  
4 process to do that, not just him but anybody who wants  
5 to submit a technology or product or practice or new  
6 installation or anything.

7 MR. SEABOLT: I agree with you on that, but  
8 I'm talking about going back to when I did this and when  
9 I made this, when I introduced this information. The  
10 only time that I've ever seen anything in regards to  
11 Filtrexx was when in 2008 one of your Filtrexx  
12 representatives did a test for the DOT and the test was  
13 denied but the DOT said you could use A and B. My  
14 question still is, though, your company never submitted,  
15 from my knowledge I've been told, has never submitted  
16 the criteria to be approved as an alternative BMP. If  
17 you weren't, then what steps did you go by to get  
18 approved? Because what I want to do is back up and do  
19 what you did.

20 MR. FAUCETTE: Right.

21 MR. SEABOLT: This is a waste of my time,  
22 energy, and money.

23 MR. FAUCETTE: I agree with you. There is no



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2 standard process, and you're exemplifying that with how  
3 Robert Singleton got his approved, how Filtrexx did, and  
4 what happens now. There was never a standard process  
5 ever in the history of the commission. This finally  
6 gives them a process to do that.

7 MR. SEABOLT: I understand where you're coming  
8 from, and I don't mean to belabor this. I know you guys  
9 are ready to go. I'm just saying that this has been  
10 very detrimental to me financially because there have  
11 been numerous, numerous times that my company could have  
12 been involved in erosion control from the perspective of  
13 compost filter socks but there's been some question in  
14 regards to whether we are approved or not. And now in  
15 the 6th Edition of the Green Book it doesn't refer to  
16 Filtrexx. It refers to the compost filter sock. I was  
17 a little surprised earlier when you mentioned something  
18 about the 5th Edition, that Filtrexx was approved under  
19 the 5th Edition. I feel like I've been at a  
20 disadvantage because I haven't been able to sit on the  
21 state TAC Committee like you have.

22 MR. DYKES: Thank you, Mr. Seabolt. Next is  
23 Mr. Wesley Zech.

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2 MR. ZECH: Thank you for letting me speak at  
3 the meeting. I'm here representing the scientific  
4 community, so I want to make sure that what's in the  
5 report that Georgia Soil and Water finally accepts is  
6 technically correct, because it not only has state  
7 implications but it has interstate implications and also  
8 national implications.

9 I'm going to kind of go through and clarify  
10 some things in relation to Joel's responses to our  
11 original discussion. Joel has acknowledged  
12 miscalculations of the original sediment yield, which is  
13 the A calculation, as a result of the area being  
14 miscalculated in the test report. He has also  
15 acknowledged miscalculation of the original R Factor.  
16 He's acknowledged a miscalculation of the original K  
17 Factor. He acknowledged that the soil loss index, the  
18 soil aggradation index, were grossly miscalculated in  
19 the ditch check testing, and then he also acknowledged  
20 in his comments back to our comments that there were  
21 numerous editorial oversights. So take that into  
22 consideration as I kind of go through trying to clarify  
23 misconceptions.

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2 So Joel has stated that the change in area  
3 from 40 feet in length to 27 feet in length is just an  
4 oversight; he adopted calculations from the 6459 test  
5 method and didn't adjust for that; and that it does not  
6 have any change on the resulting P Factor. That is  
7 false. We have gone back and recalculated and  
8 re-created using formulas, spreadsheets, commonly  
9 accepted ways of calculating all these factors, and when  
10 you change the area, it changes your K Factor, and Joel  
11 acknowledged that. He said it went from .03 and now  
12 it's .044, which is a big change. It will change your  
13 LS Factor. And then, depending upon what R Factor you  
14 choose, whether it's 231 -- joel has indicated his lab  
15 has recalculated it to 162 -- that will change the end  
16 result. It will change the total soil loss for that  
17 particular control or various products tested, which  
18 will ultimately result in a different P Factor.

19 So there are gross miscalculations and there's  
20 a misconception that just because we made this one  
21 little mistake it doesn't affect anything. That is  
22 untrue. If you go to the revised report, which is what  
23 I have, many of the A Factors for both controls and for

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2 the various products tested are based upon the data  
3 points that are collected, which is basically soil loss,  
4 and then Joel creates a regression curve. Now, the  
5 regression curves that are used for the controls or the  
6 products, they are not all linear. Some are  
7 exponential, some are logarithmic, et cetera, which he  
8 uses that regression equation that's developed from  
9 these regression curves to get total soil loss. Since  
10 the area has changed, these data points change, which  
11 means the regression curves change, which ultimately  
12 will result in a different A Value, and then when you  
13 take the ratio of the control and the products tested,  
14 will result in different P Values.

15 Another thing that we've noticed is some of  
16 the factors that are chosen there's no reference to how  
17 they were calculated, the R Factor being one of them.  
18 So in our technical discussion we created a different R  
19 Factor, which we use commonly accepted formulas and  
20 procedures for calculating this, and Joel probably did  
21 the same thing. And we had to kind of re-create what  
22 Joel did because it wasn't in the report. We were just  
23 using the report. So depending upon what R Factor you

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2 choose, if you go back it will create a different linear  
3 regression equation which will ultimately result in a  
4 different total amount of soil loss that's computed  
5 using that equation. So the R Factor ultimately will  
6 affect how various products respond.

7 The LS Factor is another item of concern. I  
8 am not sure what the true dimensions of the test plot  
9 are. It's indicated in the report it's 27 feet. I'm  
10 assuming that's 27 feet horizontally, which is going to  
11 result in a longer gradient length, which will basically  
12 change the LS Factor. And there is no questioning on  
13 what the LS Factor is. If I calculate it, Britt  
14 calculates it, my research group calculates it, or Joel  
15 calculates it, it should be exactly the same because  
16 it's using a common table as part of the Russell formula  
17 and you would just use straight interpolation of the  
18 values and we should all arrive at the same value.

19 One comment that was made earlier today is  
20 that during index testing there's lot-to-lot variability  
21 in various products that are evaluated, which I don't  
22 disagree with. There is probably small variations  
23 during the manufacturing process that results in this

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2 lot-to-lot variability. Compost socks, doesn't matter  
3 who manufactures them, there is going to be lot-to-lot  
4 variability. Granted you can't compare it directly to  
5 some of the index testing that you have for silt fence,  
6 but you can measure weight, density, circumference, et  
7 cetera, to take into account that variability in those  
8 particular products. So the one thing that I implore  
9 the TAC to think about as a result of lot-to-lot  
10 variability and silt fence fabrics or compost filter  
11 socks products, the reported P Factor should account for  
12 that variability. It should not be one firm number,  
13 because it will perform differently depending upon which  
14 product is implemented out in the field. So I'm just  
15 curious why performance thresholds and product P Factors  
16 are presented without some margin of variability as a  
17 result of that.

18 To beat a dead horse, I know we've all talked  
19 about Bentonite, so in the WK 11 standard it does say  
20 you can use Bentonite to prevent runoff or water from  
21 going around the product. Again, this is going to come  
22 down to interpretation on whether around is around the  
23 sides or underneath the product, but I've done plenty of

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2 large-scale testing, and products undercut. So it gets  
3 back to whether we're evaluating the installation or the  
4 performance of the product. This is a combination of  
5 both, and one thing to remember is that these two  
6 elements are intertwined. If the installation doesn't  
7 perform correctly and it undercuts, it affects your  
8 performance. So by evaluating those installations and  
9 truly evaluating them and not altering the installation  
10 by the use of Bentonite, whether it was a silt fence  
11 product or a compost product, if you introduce Bentonite  
12 along the bottom edge, you basically altered the  
13 installation, which therefore alters the performance,  
14 and that is reflected in the results in the report.

15 The one thing I want to point out is: You  
16 know your high retention envelope that was established?  
17 All the products that use Bentonite fell within that  
18 high retention envelope, and when the data was removed  
19 and those products were no longer there, no products  
20 fall in that high retention envelope anymore. And  
21 that's based upon the graphs that Joel provided.

22 And then another comment that Joel made which  
23 concerns me as a large-scale tester, he indicated that

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2 Bentonite is a wonderfully erosive-resistant product.

3 So if we're testing erosion and sediment control and now

4 I got a product that resists erosion, why would I

5 introduce it into my test method? Because ultimately it

6 will alter the performance of that installation.

7 Another thing that we brought up was

8 variability within the test method or the test procedure

9 applied. So the big question that we all have is

10 whether or not this test is truly repeatable. And the

11 analysis that we did where we evaluated rainfall,

12 runoff, and soil loss in the 2-inch, 4-inch, and 6-inch

13 categories, it proved using standard statistical methods

14 that it's not a repeatable test. I know Joel today

15 presented the statistics that were sent to the ASTM lab,

16 and they came back saying yes, your test is repeatable.

17 Well, these statistics, all they are is the upscale soil

18 loss values in tons per acre. It's not even the actual

19 soil loss that came from the plot. It is upscale, which

20 hides things. And all they did, which I'm unsure why

21 you would send it to ASTM for somebody to do this, it's

22 just an average in the standard deviation. That is it.

23 This little R, big R, which is supposed to stand for a



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2 function of repeatability and reproducibility, it's just  
3 the standard deviation of these values that are  
4 incorrectly calculated. So if you actually were to go  
5 back and look at the total soil loss for these different  
6 control plots and you looked at it in pounds per area,  
7 the average is much different and the standard deviation  
8 is in the realm of 22 instead of what Joel reported  
9 where it's fairly close. So upscaling values hides the  
10 true nature of the data you're collecting, which really  
11 hides whether the test is repeatable or not. So the  
12 method that is presented as a response is not a robust  
13 method. It is not a method that states how repeatable a  
14 test is, because it's just averages and standard  
15 deviations.

16 The other thing that I would like to clarify  
17 is that the silt fence installation used as a ditch  
18 check is in a 2-foot bottom-wide ditch with two-to-one  
19 side slopes. If I had to take a guess, because I live  
20 in the State of Alabama, I work closely with the Alabama  
21 Department of Transportation, this geometry of the ditch  
22 itself is atypical in the southeast. So I'm a little  
23 uncertain on why we're using an ASTM standard with such

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2 a small ditch and we're applying it in the southeast  
3 when we don't even construct ditches in the southeast to  
4 that geometry. So I just kind of leave that as a  
5 question for the TAC to consider.

6 And then the diagram that Joel has provided in  
7 part of his response, he actually should have extended  
8 that wing 25 feet from the midpoint of the channel in  
9 order to get that bottom elevation of the wing to be at  
10 the exact elevation of the point, and then you would  
11 have had to extend it further to get that 6-inch  
12 minimum. So I believe that could be another  
13 miscalculation.

14 The other item that I would like to point out,  
15 and this has been stated multiple times, is that ASTM  
16 does replicate testing, so they usually test in threes.  
17 And the reason that you test in threes is so that you  
18 can come up with an accurate average of performance for  
19 a particular installation. It is not so if one  
20 structurally fails or has a blowout, you can just shuck  
21 it aside and just use the other two values. In my lab  
22 when we do large-scale testing, if we find that a  
23 product fails structurally or has a so-called blowout,

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2 we document it and we try to investigate how that  
3 blowout occurred so we can improve the installation to  
4 improve the integrity of that particular practice or  
5 product so when it's employed in the field it's going to  
6 perform even better. We don't omit it from the report.  
7 One thing that I find concerning is that omissions of  
8 data with regards to structural failures in my meager  
9 opinion is willfully misleading the readers of the  
10 report. So structural failures should be reported and  
11 then they should be appropriately retested to see  
12 whether or not it happens again.

13 We've had discussions today about  
14 installations and whether products were overinstalled or  
15 underinstalled, and if they were per the product  
16 manufacturer's guidelines, GDOT guidelines, or Georgia  
17 Soil and Water guidelines. Some of the products that I  
18 saw, and I won't point things out, but I think they were  
19 overinstalled. And if they are overinstalled, it is  
20 going to affect your performance of that product under a  
21 test method. I am not a contractor. I'm not a  
22 manufacturer. I don't install these for a living. But  
23 I'll tell you I know this: Contractors are going to do

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2 the bare minimum. They will install it bare minimum  
3 because it's going to ultimately affect the bottom line.  
4 If they go overinstall and put in more stakes, they're  
5 spending more time installing it, which eventually cuts  
6 into their profit margins. So I would implore, if  
7 testing is done in the future, that it is tested at the  
8 minimum standards because that's what you are going to  
9 see in the field.

10 And then I heard something about water quality  
11 samples being taken and recorded, but from what I can  
12 see in the report, turbidity is not part of the report,  
13 it's not part of the discussion, it's not part of any  
14 kind of evaluation. And I will end with that. Thank  
15 you.

16 MR. BROWN: I have a question for you. I am a  
17 contractor. I work with contractors, and I've worked  
18 around contractors for 13 years. No contractor that  
19 I've ever inspected or worked with or around does the  
20 bare minimum. No contractor that I know has ever gotten  
21 a fine, that I've worked with or worked around. So  
22 stating that contractors do the bare minimum is a very  
23 untrue statement.

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2 And also, before you stated that you were  
3 representing Auburn. Today you said you are  
4 representing the scientific community. Which one is it?

5 MR. ZECH: I am a professor at Auburn  
6 University. I'm a researcher. So I'm an academic in  
7 nature, I'm a researcher, and I look out for the  
8 scientific community. I evaluate journal articles that  
9 are being considered for publication in reputable  
10 journals. I peer review those. I provide feedback. So  
11 it's all of the above, but I am affiliated with the  
12 university.

13 MR. BROWN: Who has funded you to review this  
14 process, or who has put you to the attention to review  
15 this process?

16 MR. ZECH: Industry.

17 MR. BROWN: Is that industry in this room?

18 MR. ZECH: They could be.

19 MR. BROWN: Thank you.

20 REPRESENTATIVE KNIGHT: You make a point,  
21 though. You say contractors don't underinstall, that  
22 you've never seen it. I would think on the other side  
23 of that, if you're saying that every contractor puts out

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2 and overinstalls a product, that, my friend, is equally  
3 a lie.

4 MR. ZECH: I would agree with that too.

5 MR. HAMIL: You saw Representative Knight's  
6 presentation. How much of what he showed or what he  
7 reported would have an effect on the results of the  
8 test?

9 MR. ZECH: To me that would be concerning,  
10 because you have -- and I understand large-sale testing.  
11 Just like Joel indicated, it's not easy, it's not clean,  
12 it is messy. But I believe that you can follow a  
13 standard test method, whether ASTM is a start, and then  
14 you modify and then you implement things during testing,  
15 that you can actually control a lot of those variables.  
16 From what I saw on that video, which this is the first  
17 time I've seen it, I am concerned. And if I had those  
18 things going on in my test lab I would definitely  
19 correct it. Having water just kind of go underneath a  
20 product and then that's all, whether it's being captured  
21 or not, it's not accurately recorded. It wasn't  
22 properly documented, so it really alters the opinion of  
23 whoever is ultimately reviewing the report.

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2 MR. HAMIL: When something like that happens  
3 you should start the test all over again; right?

4 MR. ZECH: If it was my test lab, I would  
5 start it all over. I know there is cost implications  
6 associated with that, and I understand why those workers  
7 were trying to do what they were trying to do to save  
8 that test because they put a tremendous amount of time,  
9 effort, sweat into building the test, installing it, and  
10 they are trying to save it. And that is admirable, but  
11 it also needs to be properly documented to make sure  
12 that that particular test is valid.

13 And another thing I'd like to point out in  
14 terms of the repeatability, you also stated that you  
15 could have taken those moisture content samples and kind  
16 of done a repeatability analysis on that, but you could  
17 have also done it with the runoff, the soil loss. So  
18 the question of repeatability I still put a big question  
19 mark on whether it is actually a repeatable test.

20 MR. RUZOWICZ: You had talked about  
21 variability and where they had set the numbers with plus  
22 or minus. Even on whatever the lowest one, let's say it  
23 was straw bales, we put a minimum, whatever that

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2 percentage was there would still be a minimum number  
3 from that one which somebody would meet; correct?

4 MR. ZECH: There's multiple ways to look at  
5 it, but I'm hard pressed in just arbitrarily selecting a  
6 number. And I know it's not an easy job. I've done --

7 MR. RUZOWICZ: As far as when you're going to  
8 look to put other BMPs to set a benchmark standard,  
9 which is what this grant was set for, was to look at  
10 what we already had and set that benchmark standard. So  
11 even when you do put a plus or minus on the variability,  
12 there would still be a lowest number which somebody  
13 would ultimately have to meet.

14 MR. ZECH: But at least you're giving  
15 variability there, but I'm still concerned in setting  
16 the P Factor at .03 or .04 because you're really  
17 throwing out some products or practices that are doing a  
18 pretty good job capturing soil. And I know I'm not the  
19 only one that has made that statement because I've  
20 looked through some of the comments, and others have  
21 made the same statement. You have high-performing  
22 practices as long as the testing has been done correctly  
23 in all the products, so to cut it someplace arbitrarily,



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2 I question it.

3 MR. RUZOWICZ: The only reason I believe that  
4 the group did that was because there was already a  
5 standard set as far as having a traditional type stake.  
6 I don't know that there's any scientific documentation  
7 other than flow-through rate as to why something got to  
8 be a type C previously. Like you said, it wasn't  
9 scientific; it wasn't just the middle of the road.  
10 Other than that, it would be up to a design professional  
11 to set a minimum number, just talking in general, for  
12 them to select which one they want to use along  
13 sensitive and nonsensitive waters. But again, we're  
14 going back and we're going to look at all this stuff and  
15 look at the testing and all this stuff that you have  
16 brought up. But even if you do have plus or minus, I  
17 still think you'll have a minimum benchmark number which  
18 people would know they would need to meet.

19 MR. ZECH: Eventually, yes.

20 MR. RUZOWICZ: And then that plus or minus  
21 could be taken into account if there was still a thing  
22 for sensitive area application, so that if they were  
23 within that plus or minus and the group decides to keep

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2 a sensitive area, then they could fall into the  
3 sensitive. I think that's more what you're kind of  
4 referring to, not necessarily for the bottom.

5 MR. ZECH: Correct.

6 MR. DYKES: Thank you, Dr. Zech. Next to  
7 speak is Michael Perez.

8 MR. PEREZ: In the original report there were  
9 two P Factors reported. There was a P Factor in the  
10 appendix, and then you also noted a P Factor in the  
11 summary report, summary table. Those two P Factors are  
12 completely different in the way they were calculated and  
13 in the numbers they yielded. We pointed this out in our  
14 original review, and Mr. Sprague has said the second P  
15 Factor, the one included in the appendix, was irrelevant  
16 and it shouldn't be used. So my question is what is the  
17 difference between those two P Factors and why are you  
18 choosing to use one and not the other? Can you answer  
19 that?

20 (Inaudible)

21 I'll go ahead and answer your question. The  
22 reason there's two P Factors calculated is because the  
23 one in the summary table is based on actual data that's

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2 collected during testing. The one in the appendix is  
3 based on theoretical numbers that come from your K  
4 Factor, your LS Factor, your R Factor, and your C and  
5 your P. It's from the Russell equation. So when your K  
6 Factor changes, when your LS Factor changes, when your R  
7 Factor changes like you've stated that they were  
8 incorrectly calculated in the original report, that  
9 second P Factor that's calculated in your appendix is  
10 completely different and you can no longer correlate  
11 that second P Factor in your appendix with the P Factors  
12 you're reporting in your summary table. If those two  
13 were calculated with the same factors, the numbers would  
14 correlate very closely. So that was my two cents on the  
15 two P factors.

16 MR. DYKES: Thank you, Mr. Perez. Joel, if  
17 you'd like to make any response.

18 MR. SPRAGUE: I'll just be brief. Our Auburn  
19 friends have kind of expressed what was in the reports  
20 that you received. I think everybody got the reports  
21 from the first one. So I won't belabor it because you  
22 got my responses as well, and we started to look at  
23 those.

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2 In a nutshell, the testing we do is  
3 standardized testing. The calculations that have been  
4 kind of beat up here are -- calculations become the  
5 engineering side of this. So this 11340 is derived from  
6 6459 in which for a decade now there's been an accepted  
7 process of using that data in calculating the C Factor  
8 for 6459. So we have just transported for 11340 the  
9 same use of all those values for calculation of the P  
10 Factor; whereas, in 6459 you set P equal to one, and  
11 11340 you set C equal to one.

12 I'm not going to get in a spitting match,  
13 especially with the bright field of people from the  
14 university. As you noted probably in the notes here,  
15 this is something you just vet through the ASTM process.  
16 If you can get everybody to buy into your calculation  
17 procedure, then that's how the method starts going. So  
18 I just encourage them to bring those ideas on  
19 calculating different numbers differently. The idea  
20 that our numbers are in error is, well, I think that's  
21 playing a little loose with things.

22 I guess all in all we didn't really break any  
23 new ground here. I can't express enough we're doing

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2 standard tests. So the whole term "repeatability" is  
3 defined by ASTM and how you describe it is defined by  
4 ASTM. So variability is something people can do their  
5 own way, and I think that's a fairer description of  
6 what's being discussed as, if you look at this, that,  
7 and the other, you see a great amount of problem with  
8 the repeatability. If you gauge it the way ASTM does,  
9 the test has a great deal of repeatability. The  
10 results, I hate to put words in anybody's mouth, but,  
11 Marc, when you saw the results a couple years ago, well,  
12 looks like what we see every day. And if we got a  
13 little lackadaisical, that's how it all appeared. We're  
14 getting results that represent what we're seeing in the  
15 real world. I think that's across the board.

16 So the vagaries of large-sale testing, we've  
17 heard and seen more than we ever wanted to today on  
18 that, but I think at the end of the day this is just  
19 yeoman's work and what the TAC has done, what the  
20 Georgia Soil and Water has done here is landmark work,  
21 and I don't, using the adage that Marc used, throwing  
22 the baby out with the bath water, we need to find some  
23 way around doing that. Because it seems to me, and this

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2    is why NTPEP is interested in this, they just want to  
3    test. Every state in the country people want new  
4    products to be used. "What can I put on my approved  
5    product list?" Every DOT is struggling with this same  
6    thing, looking for a way to make apples-and-apples  
7    comparisons between these things, and you've done it.  
8    Is it perfect? Okay, it's not perfect, but it's way  
9    better, way better than anything else, anything else in  
10   the country, really, and that's what's motivated NTPEP  
11   to follow suit. Now, what you do differently here is  
12   you take the results and you say, okay, now we have to  
13   decide what's approved, what's not approved, what we put  
14   on the approved products list. NTPEP doesn't worry  
15   about that. They leave that up to the states. They say  
16   we just want to produce independent data.

17                   And so in closing, what our goal always has  
18   been at TRI is to present you with solid independent  
19   data that you can feel comfortable setting whatever  
20   thresholds, because that's tough work. That's the  
21   politics of it all. I hope that as you consider things  
22   here and try to have a little sense of the difficulty --  
23   there's a reason there aren't a lot of people doing

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2 large-scale testing. It's hugely expensive. We had a  
3 half a million dollars of our own money locked up in  
4 this before we ever -- well, I guess just to give us the  
5 qualifications to quote for this work. And we just keep  
6 learning every day and being diligent about it. And we  
7 have an accreditation in our lab. With all that said,  
8 we don't for a minute consider ourselves perfect at this  
9 and we hope we haven't come across as glib to that  
10 effect, but we certainly are completely convinced that  
11 this is really, really good information for you to do  
12 your work with. Thank you.

13 REPRESENTATIVE KNIGHT: Mr. Sprague, I have  
14 one question. You said this data is right, reliable.  
15 I'll point everybody back to that long slide. This is  
16 where I do need an answer. That long slide, remember  
17 the corn stalk in there? It was on a 6-inch rain event.  
18 If y'all will remember, it probably ran, all that mud,  
19 just ran and ran and ran, probably ran best I remember  
20 30 or 45 seconds before anyone even noticed that it was  
21 a problem. And then it was a span of about probably  
22 seven, eight minutes between fixing it and trying to fix  
23 it and it was still running. Remember the comment, "It

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2 plugged it up a little bit"? But this is the point

3 where the data matters.

4 MR. SPRAGUE: Can I answer that first?

5 REPRESENTATIVE KNIGHT: Let me finish. Let me  
6 finish. Your data, this is the test, your data shows  
7 under the runoff in the gallons, the three tests, 151,  
8 147, and 152. And I would dare say that this committee  
9 sat here and watched that video and it went on for six  
10 or seven minutes, and I'll be happy to hook the machine  
11 back up. If you think that correlates to what's on this  
12 and what's in this report as far as data is correct, I  
13 would love to understand the explanation to know how you  
14 know that runoff was at almost -- 151.6 was the first  
15 test, Slope 2. I guess the second test, I don't know  
16 the dates, but 147.57. And then on the third one  
17 152.01. So if you're measuring the runoff through this  
18 thing, how in the world do you account for that huge  
19 difference in all of what was lost that we saw in the  
20 video.

21 MR. SPRAGUE: It was fortuitous that you  
22 caught it on the video. You heard the technician say  
23 mark the gallons when they discovered it. You saw that.



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2 You noted it. That's what they're trained to do when  
3 there's an upset. And that wasn't mud coming out. It  
4 was red water. So it was an effect that they needed to  
5 watch the -- they needed to gauge where the problem  
6 started best they could, work on it, and then make the  
7 adjustment. Remember, we do commercial testing. We  
8 don't do research. So we try and make these test  
9 reports as succinct as possible. But I don't deny,  
10 you're right, all of that, in a perfect world all of  
11 that is documented or written down. So if you don't  
12 have confidence in us because of that, I absolutely  
13 understand that.

14 REPRESENTATIVE KNIGHT: I think the issue  
15 though is you're saying mark the gallons. It went on  
16 for seven minutes and they tried to plug it up and it  
17 was still coming out from up under the thing, and I  
18 think he said, "Well, that's the best I can do," or  
19 "It's okay."

20 MR. SPRAGUE: Yeah, and since we didn't have  
21 the video we can't really tell how they bypassed it or  
22 what they did. I just can't answer that. I know they  
23 are instructed to try and make the assessment so that

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2 they can back out what happens there.

3 REPRESENTED KNIGHT: I'll tell you what, guys,  
4 if I were that manufacturer and this was my product, how  
5 much faith do you think you would have in this test?

6 MR. SPRAGUE: I know exactly. You'd look at  
7 the other two replicates first to just see. In fairness  
8 of mind you'd just say okay, two other tests have been  
9 run, so it gives me something to compare it to. Right?  
10 That's just fair to think about, you know, here's hard  
11 working, well meaning, giving their best effort, wanting  
12 to do the best for the client --

13 REPRESENTATIVE KNIGHT: Let me stop you there.  
14 I'm a CPA. We are both professionals within our  
15 profession. We've got certifications. Most everybody  
16 who is on this board or the TAC Committee is the same  
17 way. Best efforts don't get it. We are certified for a  
18 reason, and that is for the outcome and professional  
19 work that we do. No matter our most best intentions in  
20 trying to get it right, sir, that falls short.

21 I'll ask you one more question: How many  
22 times did it take you to recalculate the wetted test  
23 area? How many times?

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2 MR. SPRAGUE: Wes, what did you tell them?  
3 How many times? Okay. Three or four times. So we got  
4 to know what's going together here, don't we?

5 REPRESENTATIVE KNIGHT: Let me tell you  
6 something. I'm an auditor. If you think I'm going to  
7 leave this and you think these people (Inaudible), I'm  
8 the one that is investigating, sir. This is about the  
9 taxpayer dollars. This is about the policy of the State  
10 of Georgia.

11 MR. SPRAGUE: I absolutely understand.

12 REPRESENTATIVE KNIGHT: You were sent a letter  
13 from the director of this agency three weeks before  
14 Athens to check every single other calculation in this  
15 test. Did you?

16 MR. SPRAGUE: I went through the calculations  
17 and missed another thing when I did it.

18 REPRESENTATIVE KNIGHT: Sir, I don't doubt  
19 you're a good guy, but I'll tell this committee, guys,  
20 good efforts don't get it and don't override a  
21 professional and accurate output when you're sitting  
22 here talking about people's lives, their businesses, and  
23 what they've ever done that they've done and put

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2 everything in.

3 I'll also tell you again, back to a policy  
4 decision -- and, sir, I'm sorry. I shouldn't have  
5 responded the way I did about the install and  
6 overinstall. But y'all got to remember state law --  
7 this group is going to be in trouble. State law says  
8 this is the minimum. So when somebody is being called  
9 in on a permit and they stand behind that minimum,  
10 that's what's going to hold up in court, that's what's  
11 going to hold up in the EPD, and that is defensible. So  
12 we are not talking about the good intentions of somebody  
13 overdoing this or installing a little bit more. We're  
14 talking about the bare minimum, and that's where this  
15 group has got to go back as to the policy and how this  
16 affects the State of Georgia and the taxpayer dollars in  
17 the defense legally of this. You have got to get it  
18 right. You miss it this much, as well intentioned as  
19 you are, it doesn't matter how far you missed it. You  
20 missed it and it's going to lead to big, big  
21 ramifications for the State of Georgia.

22 MR. DYKES: That ends our public comment  
23 period. The last matter of business for today's

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2 discussion is setting of another meeting date. We can  
3 handle that multiple ways. We can try to set a date  
4 today, or as we have at the previous meetings, we can do  
5 that through an e-mail, poll what days are best. What  
6 does the committee prefer?

7 MR. HAMIL: (Inaudible).

8 MR. DYKES: Mr. Hamil suggests we send  
9 something out via e-mail. Is everybody okay with that?  
10 It would be our intention to schedule a meeting sometime  
11 in the next three weeks at the best possible day.

12 On behalf of the commission, I'd like to thank  
13 the committee members and advisers for your due  
14 diligence today, for your time and commitment. I hope  
15 y'all have a safe trip home. We are adjourned.

16 (Meeting adjourned at 4:30 )

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C E R T I F I C A T E

G E O R G I A:

FULTON COUNTY:

I hereby certify that the foregoing proceedings were reported, as stated in the caption, and reduced to the written page under my direction; that the foregoing pages 1 through 221 represent a true and correct transcript of the proceedings.

This, the 20th day of October, 2014.

\_\_\_\_\_  
BARBARA HILGER, RPR

Certified Court Reporter #A-295

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