

MINUTES
NORTH CAROLINA SEDIMENTATION CONTROL COMMISSION
COMMISSION'S TECHNICAL COMMITTEE
JANUARY 19, 2022
ONLINE WEBEX MEETING

The North Carolina Sedimentation Control Commission's Commission Technical Committee met on January 19, 2022, at 3:30 p.m. online via WebEx. The following persons were in attendance for all or part of the meeting:

COMMITTEE MEMBERS

Ms. Karyn Pageau (Vice-Chair)
Mr. AJ Lang
Mr. Donald Pearson
Dr. Rich McLaughlin
Ms. Robin Smith
Mr. Steve Albright
Ms. Toni Norton

OTHERS

Mr. Brian Wrenn, Director, DEMLR, DEQ
Mr. Graham Parrish, Assistant State Sediment Specialist, DEMLR, DEQ
Ms. Rebecca Coppa, Sediment Education Specialist, DEMLR, DEQ

Minutes:

The meeting began at 3:30 pm.

In the absence of Chair Taylor and waiting on Vice Chair Pageau to rejoin the call Dr. McLaughlin began by going over his workgroup's updates. Dr. McLaughlin looked at the practices they were assigned and compared them to what other states and NCDOT did regarding how they addressed the different questions they were assigned to address. Dr. McLaughlin presented their suggestions and research results via PowerPoint. On the left-hand side of the slides were the suggestions from staff and on the right were their findings/suggestions. Dr. McLaughlin didn't see any other states/programs manual that used calculations for diversions, although some did have sizing. Another thing that Dr. McLaughlin couldn't find in his research was a crossing diagram for diversion dikes or water bars. Several other states do also agree with staff recommendations to not use straw for diversions. For the request to include pin spacing for geotextiles for rip rap channels Dr. McLaughlin didn't see anything in other manuals so created some recommended language. For the floating intake for dewatering, Dr. McLaughlin also couldn't find anything in other manuals so again provided

some recommended verbiage. Dr. McLaughlin couldn't find a diagram that includes details for stabilizing stockpiles so included some verbiage from NCDOT. Dr. McLaughlin asked Mr. Pearson to clarify the NCDOT language. Mr. Pearson said that devices other than silt fence have been used especially on pavement where you can't drive steel into the ground (to anchor the silt fence). Mr. Pearson has seen various things including wattles, straw bales wrapped in plastic, and some other unusual solutions depending on circumstances. Dr. McLaughlin said they could change the wording from just silt fence to silt fence or other suitable barriers, or something similar and stabilizing it by vegetating it or covering it with something impermeable. The last thing Dr. McLaughlin covered was check dam testing at the Sediment and Erosion Control Research and Education Facility (SECREP) at the Lake Wheeler Road Field Laboratory. The bottom line is that the rock check dam lost effectiveness over time.

Mr. Pearson brought up a similar comment on their section to the one in Dr. McLaughlin's rip rap channel section that staff requested sediment containment in the form of silt fence outlet or similar below a sediment basin, and questioned why they would suggest putting a less efficient BMP (silt fence) after a more efficient BMP (sediment basin, etc.)? Another question Mr. Pearson postulated to the committee was should they recommend putting silt fence around stockpiles when there is no risk of the material leaving the site because of other protective measures on-site? Dr. McLaughlin's opinion on that is that stockpiles are big sources of potentially erodible sediment and it's a good idea to contain that rather than letting it run across the site and hoping it's contained elsewhere. Mr. Albright asked if anyone has heard of a stockpile height limit. Ms. Pageau said that Wake County has a limit.

Mr. Albright gave an update that he and Mr. Pearson came up with a plan to divide up who is going to look at what states/programs in January. But Mr. Albright hasn't had time to review his standards yet against the other states/programs. Mr. Pearson started some research on skimmer sediment basins, specifically on the staff question/comment to stabilize upstream and downstream slopes of the trap. The NCDOT manual does reference using seeding and matting for erosion control on the interior and exterior of the slopes on the actual device that isn't covered in geotextile. Tennessee's manual is more generalized and just says all components of the device must be stabilized. Mr. Pearson does think proper use of matting/RECPs on slopes and embankments should be included in the manual but instead of specifying coir fiber like the NCDOT manual does would suggest being more general and say RECPs or something along those lines. The next question Mr. Pearson researched in regard to skimmer sediment basins was the request to show silt bag on the plans when used for de-watering of the basin. NCDOT does not include this in their manual, and Tennessee was generic about de-watering practices requirements. Ms. Pageau recommends that they look at the Pennsylvania manual as well, since some of our states' manual was based on that research.

Dr. McLaughlin brought up the larger question of how prescriptive the manual is/should be. Tennessee's is pretty vague and leaves a lot of discretion to the engineer/designer, which has its pros and cons. Ms. Pageau stated that what we're looking for is to at least provide enough

guidance in the manual through specs of what it should look like. Mr. Pearson added one thing from Tennessee's manual that he forgot to mention: they say that the dewatering devices etc. can't be within jurisdictional wetland, stream, or buffer or within 20 feet of them.

The committee then moved on to the question if DEMLR wants and the feasibility of hiring an outside entity/engineering firm to help update and prepare the manual for the future. Mr. Wrenn stated that it's something that DEMLR is interested in doing as far as the overall objective of making the manual more user-friendly and accessible and built for the future. But DEMLR hasn't moved on finding out a way to pay for this right now. DEMLR needs to figure out what is available in our budget or if there are grant sources available. Ms. Coppa added that if the funding source is a grant, it would be helpful to have a cost estimate to include in the grant application. Mr. Wrenn agreed that it would be helpful, for example, if DEMLR has the opportunity to apply for the EPA multipurpose grant again this year. Mr. Pearson added that this committee can help DEMLR establish some goals about what the manual should grow into. Mr. Wrenn agreed that an electronic version that our inspectors, as well as contractors, etc., can pull up on their phones and tablets and use in the field is a great idea. Dr. McLaughlin suggested asking NCDOT what it cost them to publish their 2015 manual. Mr. Pearson said he'd ask some of his NCDOT contacts about that as well as asking his current company how much it costs them to produce their manuals. Ms. Pageau asked if DEMLR is expecting Mr. Pearson to provide some type of scope of work for this service as well as a cost estimate or what the expected outcome is. Mr. Wrenn said there are some things DEMLR needs to work out with our budget office, and if this can be a single-source contract or if it should go out for bid. But DEMLR would certainly lay out a scope of work and goals and deliverables where a quote can start to be built around. Mr. Pearson's thought is that having someone/a firm that has dedicated time to interviewing staff/E&SC professionals about what needs to be updated and what might need to be updated in the next 10 or 15 years would be better than the limited time the volunteers on this committee can dedicate to building a scope of what the manual needs to become. That was his original thought but now thinks if the goal is to get the manual so it's editable and online searchable then we should start there and see where it takes us. Ms. Pageau asked Mr. Pearson to describe what he thinks the difference is between what the committee will be doing/providing and how that's different than what an engineering firm would be doing. Mr. Pearson answered that the first thing is someone needs to interview DEMLR to see what is needed what they want to provide; helping work on what other states might be looking at, putting it together, wordsmithing it, putting the right diagram images in, and maybe generating some videos. Mr. Wrenn said that this manual needs to be a better product for those that are using it and added that personally, he believes our days of having a hard copy manual are gone, and an electronic document or phone app is a good idea. When it's an electronic manual you can link to the world. Mr. Wrenn can see an engineering firm helping with the layout and electronic parts/linking it to other resources, but the technical parts will still come from this committee. Mr. Wrenn thinks this committee will still provide the best way to do things and what should be in there. Ms. Pageau asked if this will reach some of DEMLR's

other tools/publications such as the inspectors manual and the videos and maybe putting them in different formats. Mr. Wrenn said that using and linking to existing resources that are out there would be great and that DEMLR's creative services department can also produce some demonstration videos depending on their availability, but wherever we can use existing resources we should.

Ms. Pageau asked if the groups that presented today felt that the committee was moving in the right direction? Dr. McLaughlin said that he thinks the feedback on specific elements is helpful and the group is working well in that way and he looks forward to hearing what other groups have found in their research. Mr. Pearson and Mr. Albright said that they are still reviewing their standards to the other states/programs and will review them as time allows. Dr. McLaughlin reminded the committee that using Google instead of going to a university site may be a better place to start as publications aren't always on university sites. Mr. Lang added that Google Scholar may be a good place to start.

Ms. Pageau asked if the groups that presented today want some time to update the committee on next month's agenda or if they need more time before presenting again. Dr. McLaughlin said that his group is done and that they've addressed all the comments. Ms. Pageau said if they're done the next step might be to forward the information to Mr. Taylor, Ms. Coco, and Ms. Coppa for them to see if there is any additional information they want before accepting it. Mr. Pearson said he and Mr. Albright can present again next month for about 15-20 minutes. Ms. Pageau said she'll give them 20 minutes on the agenda and will break down the remaining time between the two remaining workgroups and asked how Ms. Norton's progress was going. Ms. Norton said that other state's websites about compost aren't any better than ours as far as she's seen but she hasn't had a chance to talk with Mr. Taylor to see how far he's gotten. Dr. McLaughlin said that they (SECREP) have been doing some work on compost so if there is something he can help with to let him know. Mr. Pearson also added that he's going to the US Composting Council's Conference so he can help obtain some information as well.

Draft meeting minutes from 12/15/21 were approved by consensus.

The next regularly scheduled meeting is scheduled for 3:30 – 5:00pm on February 17, 2022.

Ms. Pageau adjourned the meeting at 5:00 pm