

Interview With the Queen of Stormwater:

Shirley Morrow, CPESC

By Laura Funkhouser

Shirley Morrow will present the two-day workshop "Stormwater Compliance in SWPPP Preparation and Construction Site Inspections" at StormCon in Phoenix, AZ, on Sunday, August 19, and Monday, August 20, 2007. See www.stormcon.com for more information.

Wal-Mart is the largest developer in the world. You were hired in 2004 to develop, direct, and run Wal-Mart's program to train and certify all of its general contractors to be in compliance with the National Pollutant Discharge Elimination System (NPDES) Phase II regulations for construction-site sediment and erosion control. What did you learn about contractors during this process?

We had about 450 construction sites a year, and we had to make sure every site was properly permitted and in compliance with the EPA Consent Order. We worked with approximately 200 engineering companies to prepare SWPPPs [stormwater pollution prevention plans] and 400 general contracting firms. I was the only trainer in the stormwater compliance group from July 2004 until February 2006. By myself I conducted over 100 classes—almost every Friday for two years with 150 to 200 people in every class. When I left we had 4,500 trained Wal-Mart construction managers and general contractors, project managers, and superintendents. Since the certification was only good for one year, many had been back for the third time before I left. The training was only part of my job; I also put the class together, wrote the training manual, updated the specs, and rewrote the SWPPP for Wal-Mart.

It was a fantastic learning experience to come away with where we need to spend more time and where not to spend more time. Now I'm putting together training classes to hit on the things that were red flagged.

The most amazing thing I learned

about contractors and engineers is that they will do the right thing as long as they know and understand what that is. None of these people had ever sat through stormwater training before. When I teach I try to make it make common sense. General contractors don't know anything about regulations. But when you tell them what to do they will do it. I hold up a piece of silt fence and tell them what it does. When you do that they will understand how to install it correctly.

I had a general contractor come up to me and he said, "I've been in construction for 30 years and today I learned what silt fence really does." And that was the fun part of it. They absolutely loved my passion for the industry and they were able to feed off it. I said, "I have to get you guys excited about erosion and sediment control." And the fun thing was I saw it early on. As they started catching on, two things came out. One was to take some of these products to use in ways they never had before. They were like kids in a candy store.

The other thing that I started to see was that the contractors started to compete against each other and they started to send me pictures—"Hey, Shirley, look what I did." They were proud of what they were learning and the good job they were doing.

I was on a site and this contracting firm was one of the best. The project manager said, "Shirley, you don't know what you did to me. Me and my buddy went on a trip with our wives and we were driving down the road and we passed a construction site and we both turned to check out the site." So I asked why and he said, "I was looking at the silt fence and I asked my buddy what he was looking at and he said their construction exit. Before we went through your training we never noticed other

construction sites. You've opened our eyes to this whole new arena and there's no going back now."

That was the best part of the job—touching people like that. I walked away with all of them being my friends.

You also had the input on whether to fire Wal-Mart contractors who were out of compliance or give them another chance. What was that like and what are the common causes of compliance problems on sites?

I could make recommendations whether a contractor was someone Wal-Mart wanted to work with. Adopting these new practices required a change in attitude for the contractors. They weren't very happy. We had to make them understand—don't get mad about this and build a wall and say, "I'm not going to do this." Wal-Mart had to embrace it; Wal-Mart didn't have a choice. And if you don't want to do it then we can't work together. Or you could embrace it and say, "Hey, we could be a contractor that does this better than anyone else." Wal-Mart knew the Consent Order required more for the superintendent to do so they required two full-time superintendents and one of those would do stormwater compliance full time.

What's really interesting is—all of my classes are going to harp on this now—the biggest non-compliance issues had little to do with BMPs [best management practices]. It's paperwork. It's SWPPPs that aren't written correctly and paperwork not prepared or filled out correctly.

We have to do a better job with the engineers or others who write the plans. If you have a P.E. after your name, it doesn't mean you're a sediment and erosion control expert. Few engineers learn erosion and sediment control as part of their degree. I think there are a lot of people that think—even those who have the CPESC [Certified Professional in Erosion and Sediment Control

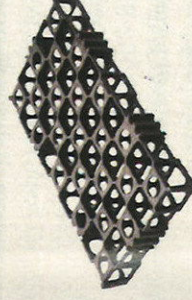
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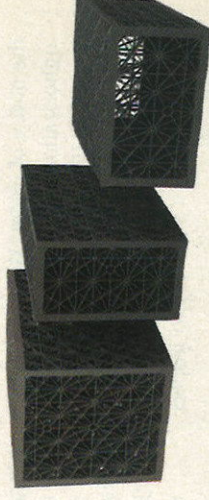
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certification]—that they are an expert in erosion control. Nine out of 10 times that's absolutely not true. Not only is it specialized; there's also an extremely diverse education that you need—you have to have a knowledge of soils and vegetation to do this. There really does need to be a university out there that provides a degree in erosion and sediment control. I don't think anybody has really covered it.

We need to make SWPPP designers understand that you don't ring the site with silt fence. I'd sit down with them and ask them, "What does the silt fence do?" And they wouldn't have an answer.

We also have a problem in the industry with people who think they know and understand the industry but they convey incorrect information to the people they are training. We need to make sure that persons training are providing consistent information.

There is never going to be consistency as far as regs—those are always going to be different from place to place—but there are some things we're going to have to be consistent about no matter what. I still get calls today from contractors who are confused.

What are the common pitfalls that inspectors should look for on a site?

We need to do a better job to get people to understand the paperwork. When you say permit, what is that? Not the notice of intent. What is your permit authorization? Treat the paperwork as if it's a BMP that you have to inspect. The EPA will write as many violations for paperwork as they do for issues with BMPs because it's so easy to inspect paperwork.

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And the stupid thing is that that's the easiest thing about compliance—to have your paperwork in order.

Another problem we have to work with—if you have a general contractor and say, "Go install these BMPs as they are on the plan" and the general contractor installs it and it's improperly designed in the plan, it's not the general contractor's fault. We have to get the engineer or SWPPP designer to understand proper design of the BMPs and proper SWPPP preparation and hold them accountable for a SWPPP prepared that does not meet the permit requirements.

If you are a general contractor who's installing BMPs, you have to understand a plan to tell if it's designed incorrectly or missing information and reject it. I tell them to send it back during the bid process. And the engineers were really getting frustrated with me because [I told contractors to reject incorrect or incomplete SWPPPs]. The contractor should not get a violation due to a SWPPP that is out of compliance when it was never prepared properly in the first place.

Is there anything that would make the NPDES permit process better for contractors and inspectors?

There are a lot of states, like Washington, that came out with a new permit with a certification process for engineers and contractors, and I think that's the wave of the future. There are two things that we have to do with engineers: get them to use better products and teach them what proper permitting entails. They aren't inclined to use anything more expensive than a hay bale. They aren't inclined to go out and learn our industry. One thing I do is hold up all of the magazines—Erosion Control, Stormwater, Grading & Excavation Contractor—and say, "It's no fault of this industry that you don't have access to the tools you need to find out about our industry."

There is so much potential for different products now that people are

seeing them. I'd like to see a tidal wave of people using the products and then everybody would be compliant.

If you were a contractor, what would be the best investment you could make for meeting compliance standards?

The best investment that a lot of contractors that work for Wal-Mart make is to hire someone in-house to do the stormwater and become a CPESC and oversee your compliance and make sure your company is properly trained. That is what was really starting to happen with the contractors.

What are you covering in the two-day workshop at StormCon?

My workshop will focus one day on how to write an SWPPP. The second day is on how to do an inspection. BMPs are a part of both of those. I'll talk about the dos and don'ts in design. One of the huge issues I have with engineers is short-circuiting. For those who don't know what that is they'll build a sediment basin and put the outfall next to the inflow so there's no time for settling out. So there's poor design as well as BMPs.

One thing—I get this question all of the time—what's your audience? Are you teaching municipal inspectors or contractors? What difference does it make? We should all be looking at the same thing. On our inspection forms at Wal-Mart all of the paperwork was inspected the same as walking your silt fence. You don't have to have two or three different types of classes depending on your audience—one class fits all. Everybody should know what to expect.

Laura Funkhouser is marketing manager for Forester Communications.

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