



## *The Certified Inspector of Sediment and Erosion Control Newsletter*

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## **Keeping Ahead In the Inspection Business**

*By E. Woodhouse CISEC #0314, CPESC #3006*

With storm water rules changing and standards of compliance becoming more defined, the impacts on construction sites and developments are also changing. Low Impact Development (LID) requirements, impervious surface reduction, and rules for treatment of storm water treatment before discharge are all now a part of the palette of storm water compliance and the increasing complexity of storm water pollution prevention on construction sites.

In many applications, under these complex rules and requirements, gone are the simple days of basic site review where reviewing perimeter controls, concrete waste handling, and other basic or simple Best Management Practice's (BMPs) are employed. These still remain but more complex elements are being introduced to the BMP rosters on projects.

Construction sites are more routine including specialty subgrade storm water treatment chambers, underground infiltration systems, storm water diversion methods into vegetated areas or storm water gardens. Some may be seemingly basic in concept and typical installation while others are extremely complex and have components of the overall design staggered over the entire site, if it is a large project or a site with a lot of impervious surface. These complexities associated with design and installation need to be considered and understood to be able to verify proper performance and capacity function.

Many are fortunate to have experience and credentials that allow them to perform on a design and install level, in addition to having inspection credentials. However, not everyone achieving the important CISEC credential and certification will have similar experience. To be an effective part of the overall compliance program in the future, an inspector will need to have an understanding of these types of systems.

This industry is ever changing. New technologies emerge regularly. All of us will need to stay on the cutting edge of the new technologies and obtain a solid understanding of them. Doing so will allow the inspector to comprehend proper performance and function and be able to properly inspect and report on projects with these types of systems and new technologies employed.

This could particularly be the case in the State of California as well as other States as they adopt increasing standards and compliance criteria become more defined in the future. Performing rain event inspections and run off sampling; being familiar with access, filtering systems associated with the overall concept; pollutant retention and residual build up and maintenance of these systems, etc., will be an essential component of providing a total service and accurate report.

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## Field Modifications

By J. Hall, CISEC #0355

How many times have you been on a project and the Erosion and Sediment Control (ESC) plan calls for a sediment trap on the top of a hill? Or silt fence installation on the high side of the project. The Contractors always seem to have a “better” way to install Best Management Practices (BMPs) than the plan calls for. At what point is it simple field modifications vs. re-Engineering the project?

The first thing to look at when approached with a possible modification is what else is involved? Is it simply moving a sediment trap down the hill to where water will actually drain to it, or is it effectively moving it to an entirely different drainage basin, thus nullifying the purpose of it. All things must be taken into consideration. When in doubt, call the Engineer, but simple modifications can be done without the added time and expense of revising the plan.

Have you ever heard “the Devil is in the details?” This is most certainly true when looking at small changes, make certain your small change here does not create a big issue somewhere else. Be sure to work backwards from your proposed change to ensure that all upstream BMPs will still function as designed, and that no significant changes are occurring downstream due to the change. Make sure to mark your plan up with a short narrative as to why it was changed, to keep those following you apprised of the situation. It never hurts to give a call to the Engineer and let him/her know what you’ve changed and why even if it is a minor modification.

All BMPs are performance based, if it doesn’t work, something must be done to make it work. Be open to ideas from the people with their boots in the dirt. They may very well have unorthodox ideas that are cheaper; easier to maintain, and work better than what is standard practice in the industry. After cleaning up failing BMPs several times, many have discovered how to build a better mousetrap.

Many small changes can save the Contractor significant time and money, and make the BMP function much better, by being open to discussing such changes, and working with them to make it happen, you are showing them that even though you are the Regulator, you can be on their side too. Developing that kind of reputation with the Contractors will make it much more likely they’ll come to you for guidance instead of trying to “get away” with something. That makes all of our jobs much easier.



## A Working Student Perspective on International Erosion Control Association

By J. Unger, CISEC #1117

Working forty hours a week at Southeast Metro Stormwater Authority and attending Metropolitan State University for at least 6 credit hours a semester as an Environmental Science major is a lot to balance. I find IECA to be relevant in both aspects of my life. It has been my observation over the last few years that both professionals and students alike benefit from IECA. My professional colleagues increasingly find that on the job training is not enough, a mixture of classroom oriented training and field experience is how many of my older colleagues stay relevant. Younger colleagues have an opportunity to move up the ladder with training opportunities often coordinated through IECA.

With environmental regulations becoming increasingly stringent, many of my collegiate colleagues will need continuing education and field training to be compliant in the ever evolving environmental field. The unique learning opportunities provided through IECA are invaluable in updating or **(continued on page 3)**





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**(Continued from page 2)** obtaining professional accreditations. *Environmental Connections* provides the latest in Environmental products and ideas. IECA provides networking opportunities that just can't be found on college campuses. Our Mountain States annual conference provides a unique opportunity to interact with academia, the private sector, local municipalities, state and federal regulators all in a central location. The exchange of ideas, concerns and solutions to environmental issues at these events makes me proud to be part of IECA.

Networking opportunities through IECA are a portal to the professional world that has increasingly become illusive to many of my collegiate friends. Many times I have referenced something from class the night before that my co-workers have found fascinated the following morning around the proverbial water cooler. There are countless times that I have referenced an article from *Environmental Connections* in a paper or class discussion that have earned me an A or approving nods from classmates and professors. On several occasions, I have called up an IECA vendor with a unique jobsite problem that has a solution in the form of a product or procedure. In just the past month, I have been asked by three students "what job opportunities do you know of" or "do you know about any internship opportunities" and I simply reply go to [www.ieca.org](http://www.ieca.org).



## Two Steps to More Thorough SWPPPs

By J. Ricks, CISEC #1100

Having a role in both construction and storm water management, I am concerned that many Storm Water Pollution Prevention Plan (SWPPP) designers do not pay enough attention to the plans they are developing. I say this not because I am an expert on developing SWPPPs, but because I see the same two issues on almost every project, which warrants some discussion.

The first issue is many SWPPPs call for ineffective Best Management Practices (BMPs) such as fiber rolls placed over pavement, silt fence or fiber rolls installed perpendicular to the slope, etc. These are items taught in SWPPP 101, yet I still find plans where the SWPPP designer calls for these BMPs even though they are ineffective. My primary issue comes from when I am wearing my general contractor hat and seeing a lot of wasted time and money spent on BMPs that are ineffective, unnecessary and costly to maintain. Unfortunately, contractors are often liable for them when an inspection occurs, even if they are ineffective.

Yes, there are requirements for perimeter controls and many times BMPs are installed at the perimeter of a site because they look good (aesthetic BMP). Public appearance is important, but so is reducing waste! Many aesthetic BMPs are a waste of materials while the construction industry is focused on reducing waste and building a more environmentally friendly product. The second issue is that many SWPPP designers do not include detail sheets in the SWPPP. In every SWPPP I have seen, designers often include the entire CASQA (California Storm Water Quality Association) BMP handbook. At times I appreciate this because it gives me flexibility to select any additional BMP without the expense of changing the SWPPP. However, an issue occurs when the designer leaves in portions of details that they don't want used in the plan.



A few months ago I had a subcontractor saw cutting pavement near a drain inlet, which was protected with filter fabric and sand bags. The subcontractor was cleaning slurry from the saw and nothing was entering **(continued on page 4)**



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**(Continued from page 3)** the storm drain. We thought we were in compliance with the SWPPP, but the designer told the owner that we were not in compliance with the SWPPP since vacuuming of the slurry was not occurring. The SWPPP included a detail sheet for saw cutting operations that listed sweeping and vacuuming as acceptable options for cleaning the slurry. While some cleaning methods in the details are more effective than others, as the inspector, it's hard to convince the subcontractor they are wrong if they are complying with the details and their actions appear sufficient to prevent pollution.

As a contractor and a CISEC, I look to the expertise of the SWPPP designer to put together an accurate and well thought out plan that makes sense and works. None of us want to pollute the water ways, but we don't need to be wasting resources with ineffective BMP and inaccurate details. If a little more time is put into developing SWPPP, then sometimes fragile relationship between owner, contractors, inspectors, and SWPPP designers can be greatly improved.

## Meet Board of Director, Joe Crea

By J. Crea, CISEC #0007

Joe Crea provides environmental compliance solutions for Kleinfelder and has 18 years of experience in environmental compliance related to soil and water resources. Joe has worked with Conservation Districts in PA and NJ; served as a National Storm Water Director for a national homebuilder; and served as a Water Quality Manager for consulting firms in California and Colorado. Joe has audited and developed storm water quality programs related to Oil and Gas operations, Land Development/Vertical Construction, Phase II MS-4, State Department of Transportation, and power plant projects. Joe earned his B.S. in Agronomy/Environmental Science from Delaware Valley College and possesses the following Certifications: CPESC #2529, CPSWQ #0038, and CISEC #0007. Joe also serves as a Board Member for CISEC.

## Information on CDHs

CDH hours are accumulated over a three year period in six different categories. The review board tries to work with individual registrants who need assistance in figuring out what are claimable hours and what are not. It is generally easier if a registrant sends in a form each year so we may contact them if they are not meeting the required number of hours before the three year period is up. Anytime a registrant has questions about their hours or renewal, we ask you to contact us at the email address or the phone number listed at the bottom. Thank you.

## Visit the New Website

Check out the new website at [www.cisecinc.org](http://www.cisecinc.org).

We have a new look with easier navigation, new features, and a more professional format. Please take time to look at the new site and if you wish, send us feedback on your opinion or if you see something that is really neat or really wrong. We value your input as this is your site.

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We're on the Web!

See us at:

[www.cisecinc.org](http://www.cisecinc.org)