



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

### **CISEC, Inc. Board of Directors**

*By CISEC, Inc. Staff*

During the annual general meeting and election held in August 2019, registrants re-elected Brock Peters and elected Marleina Lyons-Wolfe to the Board of Directors.

The Board elected new officers as follows:

- President-Brendan Cusick
- Vice President-Brock Peters
- Secretary-Marleina Lyons-Wolfe
- Treasurer-Dan Jefferson

Members:

- Ken Kristoffersen
- Josh Downey
- Tim Slatunas
- Yolanda Leal

Welcome to all returning and new members; we look forward to working with you.

### **Thank You John Balobek and Calvin Palmer**

*By CISEC, Inc. Staff*

CISEC, Inc. and the Board of Directors wish to convey their appreciation to John Balobek and Calvin Palmer for serving on the CISEC Board of Directors.

We appreciate the interest and expertise Cal showed for getting CISEC, Inc. on the social media track with Facebook and Linked In; with potential others in the future. Your knowledge of “boots on the ground” construction has been very enlightening as we move forward with CISEC, Inc.

John has brought a business understanding and ability to explain to the Board how business can be beneficial and how to best utilize that information. We also appreciate his commonsense approach to assisting the Board with sensitive situations that arose from time to time.

We are sad to lose your expertise and wisdom as members but hope your future will keep you in touch with CISEC, Inc. Good luck in all your upcoming endeavors.

#### ***Individual Highlights:***

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## **What in the Devil is the C&D Rule?**

*By Brendan Cusick, CISEC #0510*

No this is not the Cuss and Discuss rule, though many have questioned if it is. Rather, in 2009 the Environmental Protection Agency promulgated the Construction and Development (C&D) Effluent Limitation Guidelines (ELGs) and standards under 40 CFR Part 450. The intent of the regulation was to address best methods to control stormwater discharges from construction sites and have them implemented in NPDES permits. The rule was established into two parts non-numeric effluent limitation guidelines and numeric effluent limitation guidelines. This guidance was conceived to be the baseline regulatory framework for construction stormwater permitting around the country with regards to having the best available technologies to ensure the least amount of contaminated stormwater left a construction site.

Non-numeric effluent limitations focus on the traditional best management practices we are so familiar with including the following requirements for owners and operators or permitted construction activities:

- Implement erosion and sediment controls;
- Stabilize soils;
- Manage dewatering activities;
- Implement pollution prevention measures;
- Provide and maintain buffers around surface waters;
- Prohibit certain discharges; and
- Utilize surface outlets for discharges from basins and impoundments.

Non-numeric effluent limitation examples include preserving topsoil, minimizing compaction, reducing total exposed ground, and of course installation of your favorite BMPs (silt fence, sediment control logs etc.).

The numeric effluent limitations were the sticky wicket of this regulation. These requirements established a requirement of allowing a maximum numeric turbidity level of 280 nephelometric units (NTU). Turbidity is essentially the cloudiness in water and is caused by silt, sand, mud, bacteria or other precipitates. This ELG would apply to construction sites greater than 20 acres and subsequently greater than 10 acres and would require discharge sampling at specific outfalls during rain events. To meet these requirements construction sites of these acreage sizes would build sediment retention basins with designed outfalls. This would place tremendous burden on construction sites to meet these effluent limitation guidelines, and as you might expect it went to court. The result in 2014 was that numeric effluent limitations were removed from the EPA C&D rule. Additionally, the term infeasible was added to the regulation as there were aspects of existing non-numeric requirements that were infeasible. For example, maintaining buffers around surface waters or stabilizing soils within certain time frames.

Today the C&D rule is a valuable national regulation that lays out straightforward, common sense methods for determining the best methods for managing stormwater discharges from construction sites, to protect our nations waters. This is accomplished through an alphabet soup of practices including utilizing best practicable control technology (BPT), best available technology economically achievable (BAT), best conventional pollutant control technology (BST) and the new source performance standards reflecting best available demonstrated control technology (NSPS). So, when you are out inspecting a site ensure that you have your BPT's, BAT's, BST's and NSPS in order.



## Hawaii Training Session

*By Marleina Lyons-Wolfe, CISEC #1526*

The most recent CISEC class in Hawaii was held in Honolulu on the Island of Oahu, September 17 & 18, 2019. The class had sixteen participants representing local government, DOD, consultants, construction managers, and design engineers. The CISEC program continues to grow in the islands and it was great to have attendees from both the private and public sectors in this month's class.



## Red Cedar Gathering Company in Durango, Colorado

*By Dan Jefferson, CISEC #1451*

Red Cedar Gathering Company is a natural gas gathering and treating company located in southwest Colorado. During the natural gas boom pipelines and compressor stations were required to move the natural gas. Several years later, the natural gas is declining, and compression is no longer needed.

Equipment must be removed, and reclamation of the site is necessary. Once the equipment is removed, any impacted soil is removed and properly disposed. Final soil samples are taken to confirm no impacted soils remain. Then grading and seeding is completed.

Before:



After:





# Five Myths About Fibre Roll/Log Barriers (a.k.a. Wattles)

By Jerald S. Fifield, Ph.D., CISEC #0006

Are fibre roll/log barriers installed on hillsides or in front of inlets a requirement of your regulatory agency or specified by a designer? Do the barriers provide environmental benefits during runoff events? Are they installed for erosion and sediment control---or are they predominately for show and tell?

What are the limitations of fibre roll/log barriers on construction sites? First, the likelihood of properly installed fibre roll/log barriers failing due to runoff events is minimal! Second, failure of fibre roll/log barriers can nearly always be attributed to improper design and selection, incorrect installation and/or lack of maintenance. Third, the effectiveness of fibre roll/log barriers is dependent upon the product specified, selected and installed. Fourth, inexpensive products are likely to be costly for contractors!

Some myths about fibre roll/log barriers that CISEC inspectors need to be aware of include the following:

**Myth No. 1: Hillside fibre roll/log barriers “prevent” erosion.**

Properly installed fibre roll/log barriers are a sediment control BMP and do not “prevent” erosion due to rainfall or runoff events! Only when bare soil is protected with an erosion control product or vegetation will erosion be “minimized.”



**Myth No. 2: Spacing of hillside fibre roll/log barriers is not important.**

Proper spacing of fibre roll/log barriers is critical in the capture of sediment and dependent upon product diameter, hillside slope and the amount of runoff. Improper spacing of the structures results in increased erosion.



**Myth No. 3: The failure of hillside fibre roll/log barriers is due to excessive runoff.**

The majority of fibre roll/log barrier failures are due to improper installation, inadequate and improper contact with the soil, incorrect staking, improper placement along a contour and using an incorrect product diameter.



**Myth No. 4: Fibre rolls/logs should always be installed on top of an Erosion Control Blanket.**

An erosion control blanket (ECB) provides bare ground cover that minimizes the generation of sediment due to rainfall and runoff. Fibre roll/log barriers on top of an ECB provide minimal benefit for controlling erosion and are rarely necessary when rolled erosion control products (RECPs) are properly installed.

**Myth No. 5: Fibre roll/log barriers prevent sediment from entering a storm sewer system.**

Only when fibre roll/log barriers are installed in front of “sump” curb inlets will minimizing of sediment-laden waters into a storm sewer system possibly occur---assuming they do not float. Light weighted fibre rolls/log barriers (e.g., straw or chipped wood pallets) float, which permit runoff waters to flow under the

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# Five Myths About Fibre ....cont'd

By Jerald S. Fifield, Ph.D., CISEC #0006

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material and discharge sediment-laden waters into a storm sewer system.

Studies by Auburn University showed that even when fibre roll/log barriers are installed per manufacturer or DOT specifications, failure occurs when runoff waters discharge under the product material due to hydrostatic pressure.

What can CISEC inspectors do when they find failures of fibre roll/log barriers? Consider the following actions:

- Photo-document the situation for an inspection report and corrective action plan.
- Determine whether the product was specified and/or installed correctly.
- Suggest to the contractor that a designer needs to consider an alternative BMP.
- At Pre-Construction meetings, alert contractors, designers and regulatory personnel of potential limitations you have observed using an incorrect product and/or poor installation.

Remember, the role of an inspector is to observe, inspect and report on what you found. It's not an easy job but ensure you do it in a professional manner.

## Upcoming CISEC, Inc. Classes and Exams

### Location/Dates:

Sacramento, CA	October 14 & 15, 2019
Kuala Lumpur, Malaysia	October 21 – 24, 2019
San Diego, CA	October 24 & 25, 2019
Calgary, AB, Canada	November 6 & 7, 2019
Santa Ana, CA	November 7 & 8, 2019
SWS Conference, Tinley Park, IL	November 11 & 12, 2019
London, ON, Canada	November 13 & 14, 2019
Denver, CO	November 13 & 15, 2019
Fenelon Falls, ON, Canada	November 26 & 27, 2019
San Diego, CA	December 5 & 6, 2019
San Antonio, TX	December 12 & 13, 2019
Lubick, TX	January 2020 TBD

Additional Classes/Exams are coming for November, December and January.

**If you are interested in becoming a CISEC, Inc. instructor, please go to the CISEC, Inc. website and click on FAQ & Quick Links; under General Questions, click on "Becoming a CISEC Instructor," then check the requirements, fill out the form and email it to [contactus@cisecinc.org](mailto:contactus@cisecinc.org) Thank you.**

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