

# STORMWATER UPDATE

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### CSW Training

#### Online Exam and Field Dates

3-28-23, 3-29-23

4-25-23, 4-26-23

5-23-23, 5-24-23

### KSU CIT Program

Certified Inspector Training (k-state.edu)

*You must complete the online portion before signing up for the field lab and test! Proctors are required to supervise the test.*

### Kansas Contractors Association

<http://www.kansascontractors.org/>  
*No Classes Scheduled*

All completed inspection reports must be submitted to the responsible Area Engineer and the contractor's WPCM within 24 hours of each inspection. The Area Engineer must sign within 3 calendar days and submit to [KDOT.stormwaterinspection@ks.gov](mailto:KDOT.stormwaterinspection@ks.gov). Failure to complete and submit inspection reports on time may result in disincentive assessment.

## R5?! Wasn't R4 Just Released?



Multiple rain event may have your project looking like this. Luckily, they stabilized as the fill was being built.

15-09002-R04 special provision took effect on March 16, 2022. Why does 15-09002-R05 take effect less than a year later on February 15, 2023?

In August 2022 KDHE released a new NPDES permit which expires in 2027. I'm not going into the permit changes, but a link below will direct you to the new permit.

<https://www.kdhe.ks.gov/DocumentCenter/View/24184>

With the changes to the permit how does that effect KDOT's Stormwater Compliance?

When I saw that the general permit allowed for 7-day SWPPP inspections regardless of rainfall amounts I knew I had to get that out ASAP. Chasing rain event inspections adds additional unpredictability to a project making it harder to stay in compliance. Now inspections can be scheduled making compliance easier.

The new permit requires that water running off a disturbed area must flow through some type of BMP before leaving the project. KDOT and Contractors do a good job placing BMPs to minimize erosion and keeping sediment from leaving a project. Area Engineers will need to be more vigilant when reviewing SWPPP designs to make sure a BMP separates a disturbed area from where water leaves that project.

Lastly, asking for time extensions for SWPPP deficiencies has changed. In the past all time extension request were sent to the SWCE. With the implementation of 15-09002-R05 time extension requests will go to the District Engineer.

## Biodegradable Erosion Blankets and You



Photodegraded netting clumping up and blowing off the project like a tumble weed.

Erosion control blankets are one of KDOT's most effective tools to keep sediment in place and encourage grass establishment. KDOT used a lot of these blankets in 2022: **379,975 SQYD of Type C, 380,423 SQYD of Type D, 339,947 SQYD of Type E, 22,201 of Type F, 21,210 of Type G and 3,980 SQYD of Type F** for a grand total of **1,147,736 SQYD** placed.

Blankets are great but one of the materials in a blanket is not, photodegradable plastic netting.

Why is photodegradable plastic an issue? Photodegradable means, "capable of being decomposed by the action of light, especially sunlight." That's a good thing, correct? A problem is once vegetation is established the plastic is shaded causing the plastic to remain for years instead of months.

What if the vegetation does not establish? Should it be easy to fix since the plastic will decompose. Not quite. When vegetation fails to establish the biodegradable parts (straw, coconut or aspen) degrade away leaving the plastic. The plastic then becomes brittle (photodegrades) and breaks apart where it is attached to the ground. If it is windy (It's never windy in Kansas!) the broken netting rolls and clumps creating a "plastic tumble weed". This plastic is now trash (just like a plastic bottle)

and needs to be removed from the project.

If the initial seed fails, can't it be reseeded? No, the plastic netting will wrap around the axels of a disk or seeder causing them to break down. The best way to fix a failed area would be to completely remove the blanket and start the process over, a labor intensive and time consuming endeavor.

An additional issue with plastic netting is animal entrapment. Birds, snakes, fish, and other animals get bound up in the net and cannot get free.

How do we solve this issue? Simple, switch to a 100% biodegradable blanket. But what about the cost? Biodegradable blanket is more expensive by 5 to 10%, but if it fails biodegradable blanket can be re-prepped with standard disking and seeding equipment. Plus biodegradable netting adheres to the soil better than plastic netting and allows animals to escape.

We have lots of stocked photodegradable blanket on hand. If we switch to biodegradable blanket what will we do with our current stock? Right now, I am looking at the July 2023 letting to switch over to 100% biodegradable blankets. Any projects let before the July letting can still use photodegradable netting.



Plastic netting that has grown up with the tumble weeds causing the washout behind the box wingwall



Close up of a plastic tumble weed. This is now trash that needs cleaned up

What about availability? At the 2023 IECA Annual Conference I made a point to talk with as many suppliers and distributors as possible about this idea. Everyone said that many states are switching to a 100% biodegradable blanket and a July 2023 switch works.

What about PQL 34.1? Right now I am currently updating PQL 34.1 to switch Class 1 Type C and D; and Class 2 Type E and F to 100% biodegradable products. Class G and H will not change. Products on the PQL that have a biodegradable equivalent will automatically be added to the list. Any other products will need to submit testing information from NTPEP or Texas Transportation Institute.

## Stormwater Update Online

This issue and all past issues of this quarterly bulletin are available online at KDOT's Stormwater website: <http://www.ksdot.org/burconsmain/Connections/swppp.asp>

Contact Mervin Lare ([mervin.lare@ks.gov](mailto:mervin.lare@ks.gov)) for questions, comments, or suggestions for future content.