

STORMWATER UPDATE

15-09002-r04 Is Coming!

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CSW Training Upcoming Dates

KSU CIT Program

<http://citksu.com>

March 23-24, 2020

March 25-26, 2020

May 04-05, 2020

May 06-07, 2020

June 10-11, 2020

Kansas Contractors Association

<http://www.kansascontractors.org/>

No Classes Scheduled

Reminder: All persons doing SWPPP inspections on all KDOT let projects must be CSW certified by July 2020!

Construction Stormwater (CSW) Training has replaced the EIT/EMT courses. All remaining EIT/EMT Certifications expired October 2019.

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. Failure to complete and submit inspection reports on time may result in disincentive assessment

The R4 revision of section 900 is currently being reviewed and revised and I thought I would throw out some potential changes. First off nothing in this article is set in stone. Once R4 has been reviewed by KDOT it will be sent to the industry for comment.

You might be asking yourself, "Hasn't the consent decree between KDOT and EPA expired? Why does KDOT need a 4th revision?" Over the last year and a half, I have witnessed regressive behavior when keeping with compliance with KDHE's

General Permit. Reports are not being properly filled out, inactive areas are not being stabilized in a timely



Cat tracking alone is not a sufficient bmp in soil stabilization. This area should be considered inactive on an oversight inspection.

fashion, inspections are

not being done in person, inspections are starting after the sun goes down, and recommendations made by oversight inspectors are being ignored. I believe the following changes will keep KDOT in compliance with KDHE's NPDES General Permit.

The changes KDOT is considering are open area definitions, WCM duties and responsibilities, oversight inspection deficiency disincentives.

The first change is to designate all open areas the Stormwater Erosion Control Conference and permanently record them on the inspection form (form 247). For projects greater than 750,000 square feet, the contractor will need to identify each equipment spread as an open area. For smaller projects the Contractor will need to split the project into open areas based physical features i.e. the roadway would split a project in half in one direction and the stream would quarter the project creating 4 distinct open areas.



Stabilized area with Class II mat to protect the channel bottom from washing out

The initially designated open areas can change during the life of the project. When a change is needed, the obsolete area becomes inactive and a justification is placed in the remarks. Then the new area is added to the bottom of the list.

The next changes deal with the WPCM and their duties on the project. The WPCM will need to be an employee of the Prime Contractor's staff. The WPCM will create a weekly stormwater report detailing the activities of the project and how they plan to manage stormwater runoff around these activities and when stabilization practices will begin. The WPCM will present their report to the project inspector for signature.

Joint SWPPP inspections will be performed on site and will begin and end during normal business hours of the project. Make sure and include inactive disturbed areas as a deficiency on the report.

The next one is big. Oversight inspections will be treated as a joint inspection and the contractor has 7 days to address any deficiencies noted. Failure to address these deficiencies will result in disincentive penalties.

All the recommended changes above will affect the ways KDOT and Contractors do business with regards to erosion control. Make sure to review the proposed specification changes and provide constructive comments on how to keep in compliance.



Temporarily stabilized project

Brown Haze of Central China

By John Richard Schrock



Typical day in Shaanxi

Visibility was so bad that some superhighways in Shaanxi and Henan Provinces had to be closed for several days. Near the end of last year, this brown haze was so heavy in my region that you could not see more than one city block away. In the U.S., we occasionally have car pile-ups when there is unexpected fog in a low area, but this fog burns off in a few hours of sunlight. This brown haze does not go away with the sun.

“How does this translate into English?” I am asked. “Smog” is the closest word we have, but it is not correct. Combined from “smoke” and “fog,” smog is man-made pollution where smoke, nitrogen or oxygen oxides, ozone, sulfur dioxides, or soot from burning of coal or agricultural stubble combines with moisture to form smog.

When sunlight changes these primary pollutants into even worse chemicals, it

becomes photochemical smog. Four decades ago, I can remember this air pollution that caused your eyes to water as you passed through Indianapolis or Cincinnati. The U.S. has greatly reduced this problem with regulations on the sources of pollution.

But this brown haze is not smog produced by pollution in China. It is a natural airborne dust that would continue to tint the sky many days of the year even if no humans lived here. In Chinese, it is called wù mái [雾霾] and it is a fine dust that blows in from the north. The source is the Gobi Desert and the Loess Plateau. Loess (pronounced “luss”) is the geological name for such windblown soil deposits. These are smaller particles than sand and are unlike the sandstorms of North Africa or our Dust Bowl of the 1930s. The United States does not have exposed loess soils that are deposited by wind and can be lifted back up by wind.

At the university in Yangling in Shaanxi, the skies are often bright blue when there has been a recent rain or when there is no wind. But much of the time, the sky has a dull haze and the distant skyline of the Qingling Mountain range disappears. China is criss-crossed by mountain ranges. Without our wide-open plains, Chinese weather fronts are very “chopped up” and weather is local.

Western professors who come on academic exchanges may have a cough for their first month as their lungs get acclimated to this persistent dust. If your windows are open in the summer, you can wipe the furniture clean today and draw your finger through new tabletop dust tomorrow.



Plastic covering around the base of a new development.



Imagine trying to cover an entire project in geotextile or other types of stabilization material.

Agriculturally, this continual loess deposit helps replenish nutrients and makes this region of China the origin of ancient agriculture. Today this is still the center of agricultural research. The layers of loess also compress the underlying deposits into a compact material which on hillsides can be cut into durable cave houses, called yáo dòng [窑洞]; they have arched entrances and comfortable conditions inside.

The students on this agricultural university campus come from across China and adjust to the periodical heavy dust. But this last fall was particularly “dusty.” Over half of the students were wearing cloth face masks, called kǒu zhào [口罩], to filter out the dust. These face masks are common in Japan and in large cities throughout Asia to reduce the exchange of airborne germs. But here, this high dust level drove many students to don a wide variety of fashionable face masks whenever they ventured outside the university buildings.

In these last two years, traveling to Beijing and back on the high speed train, I could see wide swaths of green plastic ground netting draped across any exposed soil. Whether it was a construction site being cleared for a new building, or the right-of-way at the side of a new road or railroad, if the soil was exposed and not being currently worked, it was covered by this ubiquitous green netting, called bǎo hù wǎng [保护网], literally “protection netting,” that kept the wind from lifting up the dust. These sites were near China’s residential population and any airborne soil would have a closer impact on neighbors. I inquired, and yes, this was a new law. And since every bit of exposed soil in these developed areas was covered, that law is obviously enforced.

As for the exposed surfaces of the massive Gobi Desert and the Loess Plateau, few people live there. That source of natural dust will continue---a problem China has that we don't have.

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>

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