

Changes to Approved Products List (APL) for Erosion Control Devices

For over 20 years, the Texas Department of Transportation (TxDOT) has defined the critical performance factors for erosion control products, and has established minimum performance standards which must be met for any product seeking to be approved for use within any of TxDOT's construction or maintenance activities. Based upon review and analysis of statistical and product performance data, TxDOT reserves the right to revise the minimum performance standards.

By statistically analyzing the performance data produced through controlled performance tests, TxDOT is able to maintain discrete minimum performance standards for each classification of products evaluated at the TxDOT / Texas Transportation Institute (TTI) Sediment and Erosion Control Laboratory (SEC Lab).

In order for products to be placed upon the Approved Products List (APL) for Erosion Control Devices (or more generally known as the TxDOT APL), these products must meet or exceed all adopted minimum performance standards for the applied category. Products that fail to meet any of the adopted minimum performance standards will not be placed on the APL.

Recent and potential upcoming changes in the regulatory environment, dealing with erosion and sediment control on construction and maintenance projects, has led TxDOT's Maintenance Division to continue this commitment to maintaining the list with the highest quality best management practices (BMPs) available to us. As a result, TxDOT has decided to change the minimum performance standards on erosion control products in order to guarantee better performing products on construction and maintenance projects. With increased environmental regulations, TxDOT has to ensure the best products are being implemented on projects to minimize environmental concerns and reduce the risk for product failure. The new performance standards have been developed from years of product evaluation and ongoing changes to environmental regulations.

Further detailed reasons for the changes to the TxDOT Approved Products List for Erosion Control Devices are as follows:

1. Environmental Protection Agency (EPA) regulatory changes.
 - a. EPA promulgated Effluent Limitations Guidelines and Standards for the Construction and Development Point Source Category on December 1, 2009 (74 FR 62995). This final rule established a numeric limitation on the allowable level of turbidity in discharges (primarily made up of sediment discharges) from certain construction sites. EPA had previously stayed the numeric turbidity limitation and monitoring requirements due to

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problems with the data used to develop these limitations. EPA withdrew these requirements in a March 2014 final rule.

<http://www.gpo.gov/fdsys/pkg/FR-2014-03-06/pdf/2014-04612.pdf>

- b. All the non-numeric requirements remained in the rule which potentially will make it more difficult to maintain field related compliance. Also, place holders for reinstating the numeric turbidity limit remain within the permit for once it has been determined what the new threshold will be.
2. Texas Commission on Environmental Quality (TCEQ) regulatory changes.
 - a. TxDOT follows the TPDES (Texas Pollutant Discharge Elimination System) permit TXR150000 “Construction General Permit” for the vast majority of construction projects. Due to the fact that the TCEQ has been delegated responsibility for this program from EPA, the TPDES must mirror the NPDES rules (TXR150000, Part III, Section G). The primary goal of this permit is to ensure pollutants do not leave the site, and final stabilization is achieved prior to termination of permit coverage.
http://www.tceq.texas.gov/assets/public/permitting/stormwater/TXR150000_CGP.pdf
 - b. Final Stabilization: All soil disturbing activities at the site have been completed and a uniform (that is, evenly distributed, without large bare areas) perennial vegetative cover with a density of at least 70% of the native background vegetative cover for the area has been established on all unpaved areas and areas not covered by permanent structures, or equivalent permanent stabilization measures (such as the use of riprap, gabions, or geotextiles) have been employed.
 3. EPA/TCEQ Municipal Separate Storm Sewer System requirements.
 - a. TxDOT is currently in the final approval process for obtaining a single statewide MS4 Permit for all TxDOT facilities. This process involves implementation of various minimum control measures (MCMs) as part of complying with our pending permit, some of which involve minimization of releases of pollutants from construction sites. Use of best management practices (BMPs) for erosion and sediment control are required by the MS4 as well.
 4. New requirements of upcoming (2014-2015) TxDOT Specification Item: Item 506 – Temporary Erosion, Sedimentation, and Environmental Controls
 - a. As part of the upcoming Item 506 release, it is going to become important that TxDOT utilizes the best of the best erosion and sediment control devices for our projects. This item will now require that these items be selected from either the “Sediment” or “Erosion” control approved products

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lists maintained on a quarterly basis. Limiting these choices to the products that tested the best will help ensure compliance with the above mentioned permits and potential changes to regulations in the future.

5. TxDOT Environmental Management System (EMS) has requirements to maintain compliance and involves regular inspections of our sites.
 - a. Many of the internal policy requirements of the TxDOT EMS require knowledge, training, inspections, etc. related to storm water erosion and sediment control on our construction sites.
 - b. Having a shorter more concise list of available products will allow our engineers and designers the ability to select the best available products for these purposes.
6. Other outside users (primarily other State Departments of Transportation) rely on and use our list for their projects.
 - a. It stands to reason that TxDOT would want to increase the thresholds for the products to remain on the APL, since so many other states rely on our listing for their construction and maintenance projects as well.
 - b. By narrowing our lists down by raising the thresholds, it ensures the best and highest quality products are used not only on TxDOT projects, but for everyone utilizing our list.

Conclusion and Approval of Further Action:

TxDOT recommends changing the minimum performance thresholds for the Approved Products List (APL) for Erosion Control Devices. These thresholds were recently scrutinized over the past fiscal year (FY 2014), and statistically proven to be within reason for setting new, more stringent levels for acceptance to the list. This is well within the scope of TxDOT to maintain our list with the best products available, which was and is the intent of these lists from the outset.

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