

Marcellus Shale Pipeline Project



Failed Matting



EarthGuard Applied 9/7/12



EarthGuard Results 10/7/12



VEGETATED SLOPE AFTER ONE MONTH OF HEAVY RAINFALL IN KITTANNING, PA

Challenge:

In September 2012, the second largest Marcellus Shale gas producer in Southwestern Pennsylvania sprayed EarthGuard Fiber Matrix on a pipeline project that they had a hard time stabilizing in Kittanning, Pennsylvania. After the installed erosion control matting had failed, they looked into using a more effective erosion control product.

Results:

On September 7, the production company contracted Penn Line Service of Scottdale, PA. EarthGuard was applied at a rate of 9 gal/ac along with 2800 lbs/ac of 70/30 fiber. Less than 24 hours after the application, a severe storm (over 1-inch of rainfall) went through the project area. Not only did the EarthGuard prevent erosion, it also kept the seed in place allowing for germination and permanent stabilization establishment.

"If we had used this product during the initial restoration (rolled erosion control blankets), we do not believe this area would have been a problem. I will recommend EarthGuard to my project managers in the future." - Gas Corporation, Senior Environmental Coordinator.



Highly Effective. Cost Efficient.

Terra Novo Manufactures

Erosion Control:

- EarthGuard®
- · EarthGuard Fiber Matrix
- EarthGuard EDGE™

Reclamation:

- EarthGuard FUSION™
- EarthGuard ORGANIX™
- EarthGuard ELIXIR™

Agricultural Soil Stabilization and Conditioning

- SoilMAX
- Agriflo

Dust Suppression

- DustCap
- DustGuard

Water Clarification

AquaGuard

HOW EARTHGUARD WORKS

EarthGuard Fiber Matrix is a patented technology, which combines EarthGuard and fiber to form a matrix that provides extended erosion control protection in severe situations. This effective and cost-efficient hydraulically applied formulation has set a new standard for sprayed-on erosion control BMP's.



EarthGuard utilizes an extremely high molecular weight blend of chemistry, which results in its superior charge density and soil stabilizing ability. It is designed to work directly with soil to maintain its stability by both preserving existing soil structure and flocculating fine sediment being dislodged by stormwater or wind. EarthGuard is ideal for site-winterization (seed not required), where bare soil, slopes and stockpiles must be protected during the raining season. In re-vegetation and dormant applications, the superior soil stabilizing ability of EarthGuard holds, seeds, soil, fiber and amendments in place until sufficient long-term growth/erosion control protection has occurred.



EarthGuard is available in two forms. In a prepackaged bale, EarthGuard is packaged in combination with 100% wood fiber or in liquid form, EarthGuard is packaged in a 5 gal container and is added to standard hydromulch prior to installation.

Terra Novo is dedicated to helping the storm water and erosion control industries comply with strict Federal Clean Water Regulations. Our engineers and chemists maintain a hands-on approach to solving site-specific problems by providing cost-effective best management practice solutions. All of our products are easy to use, highly effective, extremely affordable and environmentally friendly.



For technical services or to locate your nearest EarthGuard® dealer:

call 1-888-843-1029.

Visit Terra Novo online at:

earthguard.com

Terra Novo is located at: 2930 Patton Way, Bakersfield, CA 93308



