

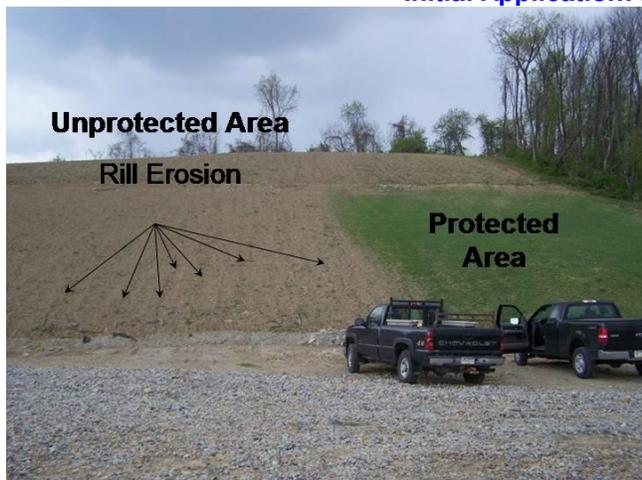


## Case Study: 2009-2010 Carmichaels, PA

In Nov 2009, a gas exploration company used *EarthGuard Fiber Matrix* on a trial installation in Greene County, PA. The intention of the study was to demonstrate that *EarthGuard* was a viable product for site winterize and or dormant fall-winter seeding purposes. A portion of the site was treated while the remaining portion was not.



Initial Application: November 13, 2009



Pictures taken April 19, 2010

According to *Pennsylvania 25 Pa. Code Chapter 102* anyone conducting earth disturbance activities is prohibited from discharging any pollutants to waters of the commonwealth. Under the Chapter 102 regulations, anyone conducting earth disturbance activities must use Best Management Practices to minimize the amount of sediment leaving the disturbed area. Pennsylvania's *Oil and Gas Regulations, Pa Code Chapter 78.53*, incorporate the Chapter 102 regulations by reference. The Department of Environmental Protection (DEP) is responsible for the administration and enforcement of Chapters 102 and 78 regulations and the Clean Streams Law.



The DEP *Oil and Gas Operations Manual* states that erosion control blanketing (either rolled or sprayed) should be considered for all steep slopes  $\geq 3:1$ , in critical areas (e.g., stream crossings, adjacent wetlands, etc.), and within 50' of surface water.

### **RESULTS:**

Data from a nearby weather station indicated the area had received over 21" of precipitation. Temperatures during that time fluctuated from a high of 90° to a low of 7° F. **EarthGuard** withstood the extreme temperature fluctuations while maintaining the soil, seed and amendments in place during the winter season. Erosion was almost eliminated satisfying DEP regulations.

The exploration company figured that on future projects they would be able to save a significant amount of money compared to the typical products they had used in the past.

### **PRODUCT INFORMATION:**

Testing by the Texas and California DOT has shown that **EarthGuard** significantly outperforms most engineered spray-on products and rolled erosion control blankets in erosion control performance and re-vegetation establishment. Applied, **EarthGuard** is less expensive these products.

Unlike other spray-on products, **EarthGuard** works directly on the soil to preserve soil structure and significantly reduce turbidity by flocculating dislodged sediment. **EarthGuard** does not harden to form a crust that prevents seed germination and growth. It also requires less fiber mulch which in turn absorbs less water giving vegetation a greater chance of surviving.

**EarthGuard** is university tested and worksite proven and is typically used in the following situations:

- 1) Full Seasonal Site Winterization - Single Application
- 2) Reclamation/Re-Vegetation
- 3) Pipelines
- 4) Road Cuts
- 5) Top Soil Piles

For further information, please visit the following web sites:

**Short 10 min. Video:** <http://www.earthguard.com/video.php>

**Product Brochure:** <http://www.earthguard.com/pdf/SalesBrochure.pdf>

**Web site:** [www.EarthGuard.com](http://www.EarthGuard.com)