



ERTEC Environmental Systems

Protecting Global Lands and Waterways™

Case Study

S-Fence™
ProWattle™

Perimeter Sediment Control and Slope Stabilization

- > Lower Project Costs
- > Better Performance
- > ZERO Waste
 - ✓ Reusable
 - ✓ Recyclable



S-Fence™ - protection at base of slope



S-Fence™ was chosen for its high functional longevity and proven high performance



S-Fence™ is made from a heavy HDPE polymer matrix outer jacket and a specialized HDPE filter designed specifically for sediment control.

Project: Colowyo Coal Mine Expansion: Elevation 7500 feet
7 mile haul road, 20 acre ops at top, 5 acre parking and staging below

Product: ERTEC S-Fence™ 20" and ProWattle Quantity: 48K LF

Owner: Tri-State Generation & Transmission

Contractors: Wollam Construction

Application: Sediment Control & Slope Stabilization

This project is an expansion of the existing Colowyo Coal Mine. Expansion is required due to depletion of coal reserves in the current mining area. The plan includes construction of haul roads and mine support facilities. The project is long duration and must conform to strict water quality requirements. A key reason for choosing ERTEC S-Fence™ is that, unlike traditional methods, it remains functional for a very long duration (functional longevity) with proven high performance characteristics.

S-Fence™ requires minimal maintenance even after many years.

S-Fence™ is a **high performance, low total cost and ZERO waste** system for construction sites which:

- Significantly reduces off-site sedimentation.
- Typically cuts first project costs by 50%.
- ZERO Waste. (Reusable, Recyclable).
- Solves silt fence problems by allowing water flow-through while filtering. Limits water back-up and ponding which causes undermining and fence toppling.

The Challenge: The current best practice is to use traditional silt fence to keep sediment from moving off-site. Unfortunately, it is common to see silt fence topple in the wind, break down in UV light or allow ponding and undercutting during storms. Road Construction projects often last 18 months or more and it is typical for a large percentage of the silt fence installation to require maintenance or even complete replacement. Estimators often overlook the cost of silt fence maintenance, removal and waste handling. Proper installation, removal and disposal is costly. On multi-phase projects, it is also desirable to relocate and reuse the BMP as construction progresses, rather than dispose and start a new phase with new materials.

Results: "We are very pleased with the performance of the S-Fence, used for sediment control while constructing a new haul road. The installation was tested twice, once during an excessive snow melt event and once during a microburst storm and the product held up very well. It only required a couple of minor repairs. This product was chosen over traditional methods due to its sturdiness, ability to use it multiple times, and its recyclability at its end of life." - Angela Aalbers, Environmental Manager—Tri-State Generation & Transmission



Collum Haul Road—S-Fence 20 installed along road

Particle filter allows water flow-through, and retains soil particles

HDPE outer jacket 8,000 openings per yd²

