The explosion of solar and wind power projects in the arid Southwest necessitates devising means to control soil erosion, and the inclusion of erosion control strategies within the scope of work. Erosion must be mitigated with high-quality products and targeted techniques.

Which type of dust control products should you use? It really depends upon a host of variables that are site-specific: overall climate, special weather conditions, soil type, topography of the project area, drainage, duration of the project, and time available to establish vegetation. In addition, think about how you can minimize long-term maintenance issues, conserve water, reintroduce native plants, and maximize site aesthetics.

Two specific products can provide effective, long-term dust control:
- **Flexterra®, High-Performance Flexible Growth Media, (FGM)**
- **CocoFlex®, Extended Term Flexible Growth Media, (FGM-ET)**

**Flexterra® HP-FGM Specifications:**
- Functional Longevity: < 18 mths
- Slope: less than or equal to 1H:1V
- Level of protection (effectiveness): 99%
- Water Holding Capacity: 1700%
- Vegetation Establishment (800% min)
- Application location: extremely eroded areas, areas exposed to extreme weather conditions, and sensitive areas requiring long-term functional longevity

Flexterra® HP-FGM consists of 100% recycled and phyto-sanitized wood fibers and biodegradable crimped interlocking fibers. Micro-Pore particles optimize water and nutrient retention while increasing wet-bond strength and increased resistance to sheet flow. Its 100% non-toxic biopolymers and water absorbents encourage vegetative establishment.
Tests following EPA protocols confirm the product is completely safe for aquatic and terrestrial life forms. It immediately bonds to the soil surface to reduce turbidity of runoff for up to 18 months.

**CocoFlex®, FGM-ET Specifications:**
- Functional Longevity: < 24 mths
- Slope: less than or equal to 0.5 H:1V
- Level of protection (effectiveness): 99%
- Water Holding Capacity: 1500%
- Vegetation Establishment (500% min)
- Applications: extreme erosive areas, extreme weather conditions, sensitive areas, requiring a maximum functional longevity

**CocoFlex® ET-FGM** is a hydraulically-applied, flexible erosion control blanket with a functional longevity of up to 24 months. It is composed of long strand, thermally processed wood fibers, slow degrading coconut fibers, crimped biodegradable interlocking fibers, and biopolymer tackifiers. It requires no curing period and upon application forms an intimate bond with the soil surface to create a continuous, porous, absorbent and erosion resistant medium that allows for rapid germination and accelerated plant growth.

**Cocoflex® ET-FGM** provides several key performance advantages:
- Longevity - Two full years of protection, keeping the dust down, off of the solar panels, allowing the native vegetation to establish, per ASTM D5388
- Superior Water Retention, and maximum water infiltration keeping moisture onsite, reducing runoff, in the arid climate which accelerates the emergence of vegetation, >1500% by weight
- Outstanding Erosion Control effectiveness, 99.99%, unsurpassed erosion prevention, even in high wind and precipitation runoff from of the individual panels.
- Excellent Vegetation establishment, > 500% compared to bare soil per ASTM D7322.
- Manufactured from nontoxic biopolymer tackifiers, thermally refined wood fiber, long lived coconut fibers, and crimped biodegradable fibers.
- CocoFlex® ET-FGM is immediately effective, with no cure time required, and can be applied on a wet site or in damp weather.
- CocoFlex® ET-FGM is 100% Biodegradable, per ASTM D5338, and Non-toxic to plant or aquatic organisms, per EPA 2021.0, Whole Effluent Toxicity testing.
- Cocoflex® ET-FGM has no germination or growth inhibiting factors and does not form a water-resistant crust that can inhibit plant growth.

**A Complementary Strategy**
Incorporating Native seeds into these hydraulic mulches can be an important part of extending the dust control ability of a project by building in a 'delayed seed'. Seeds with a high hard seed component can ensure seed survivability when moisture is not readily available. As a general rule, seed with a high hard seed content means the seed will need outside pressure to break the dormancy (fire, heat or acid wash in a laboratory) so it will germinate. Dormancy enables seed to remain viable as they patiently wait at the project site for the right environmental conditions for optimal germination. This is a very effective strategy for seeding an arid site.