

US EPA ARCHIVE DOCUMENT

Sustainable Erosion Control

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Meeting the Challenge for a Healthier Community





Quality Compost

- Quality compost begins with quality partners – 2nd Season Recycling and many local municipalities
- Produce WDNR approved S100 compost
- Produce to USCC standards
- Large inputs = quality results



Quality Compost

- Wisconsin DNR Specification S100 Compost
- 98% passing 0.75 inch screen
- Less than 1% physical contaminants (glass and plastic)
- pH between 6 and 8
- Maturity
- Lack of pathogens, chemical contaminants and weed seeds





Red **B** Select System

- Compost Blanket Seeding
 - Blowing well-cured, mature landscape compost with seed onto suitably prepared soil
 - Innate characteristics of compost allow for
 - Increased germination rates
 - Decreased germination time
 - Improved stand establishment



Results



From This...



To This...



To This...



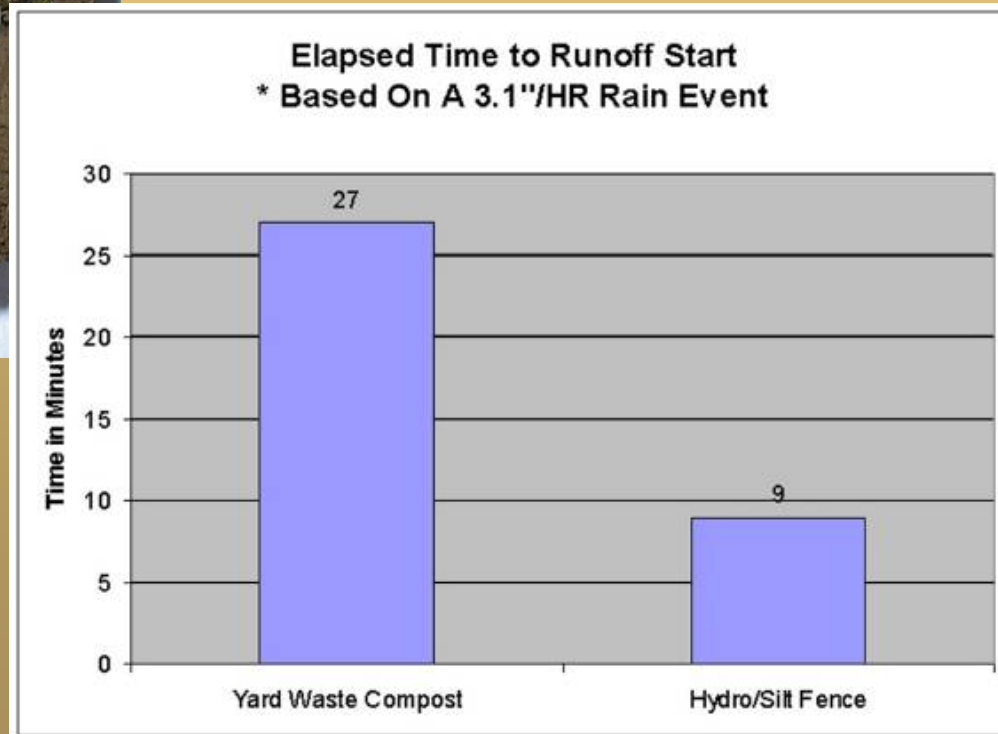
**60-70% faster than
conventional seeding**



As Erosion Control

- Engineer specifications usually include 2” of Compost rough applied to slopes less than 3:1.
- Tilthy nature of compost allows it to absorb impact of raindrop better than bare soil
- Quick germination critical
- Erosion mat can be used to improve function on steeper slopes.
- Use polymer to ensure water holding capacity and to “knit” compost particles together – same technology used to land helicopters in first Iraq war.

As Erosion Control







As Erosion Control

- CECB (Compost for Erosion Control Blanket) is not an end-all solution. It has limitations.
- Under right conditions, it provides sustainable, quality erosion control with temporary or permanent vegetation.



Sediment Control

- Starts with “Soxx” technology.
- HDPE woven soxx filled with a byproduct of the composting process called “overs”.
- Twice the flow rate of silt fence
- Up to 96% Sediment Removal
- No trenching required. Weight of soxx exceeds 20#/linear foot
- Entirely Bio-degradable products available
- Chemically active compost binds nutrients



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LAND IMPROVEMENT SYSTEMS



Failed





Sediment Control

- A 12” diameter soxx is equivalent to a 36” tall silt fence
- Except that it works better, doesn't have catastrophic failure and is largely biodegradable.





Sediment Control

- Silt Soxx can be used in conjunction with compost blanket seeding for erosion control.
 - Ditch Chexx
 - Slope Interruption
 - Inlet protection
 - Channel Soxx

Sediment Control





Living Walls

What is a Living Wall?

- Long (108') polypropylene mesh tubes filled with engineered growing media
- Extruded on site
- 4 diameters can be intermixed for height
- Near seamless lengths as long as you want
- Can be seed injected, plugged, liner planted, and compost seeded or mortared
- Any soil type and any terrain

Living Walls





Living Walls

- A Green alternative to conventional slope stabilization
- Reduce your carbon footprint using local materials.
- Long-term stability created by plant material which also attracts wildlife
- Walls can be near vertical.







THANK YOU!



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