# Frequently Asked Questions

# > Will the sand stay in place?

Yes. The sand infill, along with the system's transmissivity, is specifically designed to handle more than six inches of rainfall per hour with minimal erosion. Plus, the engineered turf works as a grid that "locks" the sand in place to help resist erosion should rainfall exceed the drainage layer's flow capacity.

# > How stable is the system and what is the interface friction?

The ClosureTurf® system is exceptionally stable, with an interface friction of 43 degrees between the engineered turf and Super Gripnet. In fact, this equates to a 3.0 safety factor for typical landfill slopes.

# > How is the system anchored?

ClosureTurf typically is only terminated at the toe or on the outside perimeter swale. Anchoring to resist pullout forces is not needed since ClosureTurf incorporates a high-friction, continuous ballast that resists sliding.

#### > What about wind resistance?

ClosureTurf's unique ballast and aerodynamic properties provide cover uplift resistance for high category hurricane force winds.

## > Can equipment be driven on the Closure Turf system?

Yes. Typical maintenance vehicles with ground pressure of up to 100psi can operate on the system.

## > How long will the turf last? What about fading?

An independent UV weathering study performed on our engineered synthetic turf utilized accelerated extreme exposure conditions to indicate longevity over 100 years to half life as proven by multiple independent evaluations. The engineered synthetic turf also provides a protective covering for the membrane against heat and UV degradation adding many years of functional life to the membrane.

## > What colors are available?

ClosureTurf can be produced in green, tan or a green-tan blend to optimally blend in with the surrounding environment.

### > Is wind erosion a factor?

Wind erosion is not a factor. In fact, ClosureTurf's grass strands and stable sand infill minimize the effects of wind erosion.

# > How does Closure Turf respond to gas build up as a result of collection system shutdowns?

The ClosureTurf system includes pressure relief valves that can prevent uplift in the event of a flare shutdown. These valves can also integrate into existing GCCS systems.



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# > Is Closure Turf® currently being approved as a final cover?

Yes, the system has received approval by several states and by the EPA as a final cover system. The system far exceeds the performance established by states' prescriptive design and EPA "Subtitle D" criteria. Due to ClosureTurf's ability to help lower a state's and local government's potential liability for closure care and environmental superiority over a Subtitle D standard cover, we anticipate final cover approval in all states and territories.

# > What happens when the system needs replacing in the future?

It's true that the engineered turf component may need to be replaced at some point in the distant future (i.e. 100 years+) based on level of care, however, this is a very minimal financial obligation when compared to the savings of not having to perform on-going erosion repair, mowing and reseeding. Note that due to the protection of the membrane as provided by the engineered turf, it is expected to last several hundred years.

# > How does Closure Turf address environmentalists concerned about artificial grass?

ClosureTurf is more environmentally friendly than the current EPA Subtitle D cap requirements because it:

- > Offers over a 75% reduction in the carbon footprint compared to traditional covers
- > Creates less siltation and associated ecological impacts to waterways
- > Eliminates land destruction for borrow
- > Is 100% recyclable

- > Returns more water to the environment
- > Reduces truck trips/haul trips by 500 to 600 per acre
- > Greatly reduces GHG releases through more frequent, incremental closures

# > What is the oldest real-world example of Closure Turf?

The first installation of ClosureTurf was in 2009 at the Lasalle-Grant landfill in Jena, Louisiana. This was a 9-acre municipal solid waste landfill that has continued to perform successfully with no failures to date. In fact, over 25 million square feet of ClosureTurf has been installed successfully with no reported problems or failures in 18 states since inception.



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