

Did you know... that the Twin Oaks Landfill works with engineering consultants to ensure that everything at the landfill is always up to code?

“We’ve provided engineering services to BVSWMA for over 15 years. These services include geotechnical engineering, construction oversight, Waters of the US determination, groundwater monitoring and reporting, and construction quality assurance during landfill sector construction,” Senior Engineer, Bill Cullins, explained.

That’s exactly what they’re doing right now. What was once just a hole in the ground is now a beautiful new landfill cell. Cullins and his team at [JBS Engineering](#) made sure of it.

“It covers an area of about 11 acres, which is equivalent to about 10 football fields. The landfill sector is about 22 feet from natural ground and it contains a Subtitle D liner,” Cullins said.

The Subtitle D liner is multi-layered.

“Subtitle D liner system consists of 2 feet of compacted clay, a 60 ml plastic liner, a geocomposite layer, and 2 feet of protective cover. This system is designed to protect underlying soil and groundwater beneath the cell.”

Once the clay is compacted, the plastic liner is deployed.

“The 60 ml HDPE is similar to the thickness of a quarter. It is typically brought to the site in rolls that are 22 ½ feet wide and 560 feet long. The HDPE is deployed upon the floor of the landfill sector, and then it is seamed with a fusion welder at a temperature of 850 degrees.”

JBS Engineering will certify the strength and durability of the seams.

“Once it is completed, one end is blocked off and the other is pressurized to 30 psi. After 5 minutes, if there is no pressure drop, the seam is accepted and we move onto another seam.”

Once the plastic liner has passed the test, it's time to lay down the geocomposite layer.

“Geocomposite consists of a plastic grid sandwiched between two pieces of textile fabric. This creates a drainage layer for leachate to run along the bottom of the landfill to the leachate collection system.”

The Twin Oaks Landfill takes pride in doing things the right way, which is exactly why we enlist the help of JBS Engineering.

“Our task is to provide 3rd party quality control assurance for BVSWMA to ensure the design of the Subtitle D system is implemented in the field in accordance with the design plans,” Cullins said.

Once approved by the Texas Commission of Environmental Quality, this cell will become the working face of the Twin Oaks Landfill, meaning this is where the trash will go!

To learn more, visit the Twin Oaks Landfill website or follow us on Facebook, Instagram, and LinkedIn.