Our friends at Weaver Consultants Group have taken on a new venture– and they've asked the Twin Oaks Landfill team to play a big role in it!

Their engineers recently installed ExWON units on our compactors.

ExWON stands for Exposed Waste Odor Neutralizer.

The goal of the ExWON unit is to minimize odorous compounds emitted from the working face– in other words, it will make the landfill less stinky.

Here's how the ExWON works:

Chuck Young: "They take our odor neutralizer and run it through some air atomizing nozzles to really atomize it and get it to the gas phase. That interacts with the odors, neutralizing them, and causing the odors not to escape the boundaries of the landfill and into the surrounding neighborhoods."

Of course, once the ExWON units are installed, it is time to test them out.

Dr. Emmanuel Varona-Torres: "We're going to set up 100 yards downwind from the working face to collect air samples in these canisters for 5 minutes. We'll do 5 total samples with the system off. We're targeting 43 compounds that are associated with waste handling operations such as MSW. Then we will collect samples with the system on and collect 5 more samples. We take all of our samples back to our collaborators at the University of Texas - Arlington, where I

have developed a specific method to target these compounds, and then we analyze them."

So, why did they choose the Twin Oaks Landfill?

Chuck Young: "We've worked with Twin Oaks before. They are great to work with, great partners, always pushing the boundaries and being on the front edge of new technology for landfills. We were looking for a place to do this trial, and Twin Oaks came to mind as a great candidate."

Air samples were analyzed at the University of Texas at Arlington by gas chromatography triple quadrupole mass spectrometry (GC-TQMS). The analysis found that 14 odorous compounds were detected when the system was turned off.

With the ExWON system turned on, the analysis shows a 50% reduction in odorous compounds at 30 feet downwind of the working face.

The results of this ExWON System Test will be explained in greater detail at the Global Waste Management Symposium in February 2026.