DEUSA Fleet Success Stories: American Snuff Co.

Location: Clarksville, Tennessee
Fleet type: Nonroad/off-road All-electric Terminal Tractors

Narrative: American Snuff Company (ASC) has a long history of producing smokeless tobacco products, dating back to 1782; they moved their headquarters to Tennessee in 1912. They acquire tobacco from regional farmers that is processed at their Clarksville manufacturing facility before being incorporated into a variety of high-quality smokeless products. They produce mostly snuff and loose leaf tobacco products including such well-known names as Grizzly, Kodiak, and Levi Garrett (John Garrett II started the company).

East TN Clean Fuels (ETCF) got to know ASC in early 2023 thanks to them both having working relationships with Orange EV, an electric-only terminal truck manufacturing company out of Kansas City, KS.

In 2021, an internal ASC team at the Clarksville site was discussing the problems they were having with some of their terminal tractors (which may also be called yard dogs, spotters, hostlers, mules, and yard trucks). In Clarksville, they have over 10 different buildings that process different products or manage different steps in their processes. At the time, Senior Engineer Technologist Rupert Kendrick jokingly mentioned during a meeting "Let's buy some electric tractors and we won't have this problem!" The team leader at the time said, "Why don't you look into that." Over the ensuing two years, Rupert did just that – found and connected with Orange EV, was able to test drive their tractors at their facility, and then purchased and acquired three that are now used at the Clarksville site.

Rupert says, "When the demo truck was able to handle our duty cycle, we knew this was the direction we needed to go with our terminal trucks. During most shifts, they typically do not need to opportunity charge and can run the whole shift, but we use the chargers during shifts when they are needed."

Outputs & Outcomes: There are various benefits to ASC's move to using electric terminal trucks. It starts with no more diesel pollution affecting the workers at the factory, and the driver. Diesel vehicles are notorious for generating not just fine particulate matter (PM-2.5, particles are about 30-times smaller than a human hair), but a lot of PM-1.0 – extremely small particles that are less than 1 micron in diameter, and which can go completely through the lungs and directly enter the bloodstream.

Other benefits include the following.

- ✓ No noisy engine – the driver can better hear what is going on around him or her.
- ✓ These trucks will reduce ASC's need to ride the wave of petroleum price volatility, which brings more stability to transportation management's fiscal planning. *(Prices for West Texas Intermediate crude oil have vacillated from $33.71 per barrel in 2000, to $196.84 in 2008, to $22.61 in 2020, and to $90.79 in 2023.)*
- ✓ That elimination of released criteria pollutants into the local community.
- ✓ Last but not least – and possibly of the greatest significance – the greenhouse gases (GHG) reductions. In Tennessee, the Tennessee Valley Authority provides power to almost the entire state. They have reduced the amount of coal used in electricity generation in Tennessee from nearly 60% in the early 2000's to roughly 20% in the early 2020's and are now at an almost 60% GHG-free electricity production (thanks in large part to a nearly 40% nuclear base load). From ETCleanFuels analysis, switching one diesel terminal tractor to one electric tractor can yield a 50-70% reduction in GHG emissions each year, which supports ASC's drive to become more sustainable.

Above – Rupert Kendrick (l) and an Orange EV terminal tractor driver stand in front of the tractor he was driving that day. Below – two Orange EV tractor drivers talk briefly during a shift.

Best Practices & Lessons Learned:

1. Companies like Orange EV offer free demos to potential customers. That kind of first-hand experience is critical to not just fleet management or tractor drivers, but to anyone who works around or near them to better understand that electric is clearly the best choice in this application.
2. Once drivers are trained and ready to start using the tractors, get input from them on all facets of the tractor's operation. The more input is gathered from the actual users of the product, the faster issues can be resolved.