By: Vaughn Cassidy

Bridgestone APM (BAPM) is a North American subsidiary of Bridgestone Corporation. The BAPM facility is located in Dickson, TN and specializes in the design, development and manufacturing of energy absorbing and foam seat pads for the automotive industry. BAPM expanded their Dickson plant in 2015, creating an additional 100 jobs, bringing the overall workforce at the plant to 230. In July 2018, BAPM joined the other Tennessee-based Bridgestone North America facilities in becoming members of the Tennessee Green Star Partnership.

One of BAPM’s biggest successes in reducing potential air pollution has been the annual elimination of approximately 23 tons of volatile organic compounds, which was achieved by switching from solvent glue to water-based glue. “This was a simple and direct way for us to significantly reduce our air emissions,” said Randall Arms, Environmental Safety and Health Coordinator for BAPM in Dickson.

Polyurethane foam waste can be difficult to repurpose due to a lack of recycling vendors willing to handle the material. However, BAPM was able to work with Desert Polymers, an Arizona-based recycler, to redirect polyurethane waste to Desert Polymers to re-blend the material for carpet padding. A total of 4,000 lbs. was reused in this manner and eliminated from the waste stream in 2017 alone. With 23,000 seat cushions being produced daily from BAPM, eliminating a primary waste stream represents a major success.

“Every five seconds we produce another seat pad or energy absorption piece from expanded foam,” said Bill Miller, Plant Manager for BAPM. “In 2017 we were at an 80% diversion rate, and our goal is to be 95%, or virtually land-fill free, by 2020.” As a major supplier to Toyota, Subaru and Honda, BAPM remains committed to waste elimination. In 2017, a total of 22,000 lbs. of scrap cloth was recycled. “Since then,” said Miller, “the use of cloth has been greatly reduced.”
As any facility moves closer to becoming zero waste to landfill, addressing remaining waste streams become more and more challenging. At only 1% waste with the foam seating, BAPM is exploring a rather unique way to reduce that to 0.5%. “We have noticed that at certain levels of humidity and building pressure,” said Arms, “our foam expansion products are nearly free from defects. If we can implement controls or at least accurately measure those parameters, we’ll significantly reduce the hard-to-eliminate waste streams that remain. “Another success with waste has been development of a recent partnership with major recycler, Appertain, who accepts APM’s polypropylene molds.

BAPM’s other sustainability efforts benefit their employees and local community. Simply known as the Bridgestone Recycling Event, every year on various dates the facility accepts electronic wastes such as computers, printers, small appliances, fax machines and telephone equipment from their employee’s homes and the public. “If we encourage them to recycle and reduce waste at work, we should encourage them to do that at home too,” said Arms.

As one of the newest Tennessee Green Star Partners, BAPM has been invited to take advantage of the Tennessee Materials Marketplace, an online platform allowing businesses and organizations to connect and find reuse and recycling solutions for waste and by-product materials. In doing so, BAPM can join other Bridgestone Green Star Partners in promoting and participating in Tennessee’s emerging circular economy.

Bridgestone APM’s commitment to innovation and sustainability as well as outreach to the community makes them a welcome addition to the Tennessee Green Star Partnership.

The Tennessee Green Star Partnership is a voluntary environmental leadership program designed to recognize industries in the state that are committed to sustainable practices. If you are interested in joining Bridgestone APM Company and other sustainable industries in Tennessee by becoming a member, please contact us.