tyco

Tyco's New World-Class Research & Testing Facility in Marinette

BACKGROUND

Tyco Fire Products LP recently constructed an \$11 million world-class advanced research and indoor testing facility at its Fire Technology Center (FTC) in Marinette, Wisconsin. The 23,500 square-foot facility and the work being done there is already playing a critical role in the development of next-generation non-fluorinated firefighting capability, which will be formulated without the use of per- and polyfluoroalkyl substances (PFAS).





State-of-the-Art Wastewater System

The indoor testing facility has 55-foot ceilings and full-scale hydraulic equipment to enable testing foam in real-world conditions. While most of the foam tested in this facility is non-fluorinated, there is some limited maintenance testing of the hydraulics of legacy equipment/products. So the building design also features a self-contained waste treatment system that uses the latest technology starting with anaerobic digestion, a natural process in which microorganisms break down any organic materials in the wastewater, and then on to granulated activated carbon and ion exchange tanks to treat any wastewater contaminated with fluorinated foam tested in the facility. All PFAS removed is sent to permitted facilities licensed for PFAS disposal.

Saving Lives for Generations

The 800 employees who work at the FTC, some of whom are the fourth generation in their family to do so, are proud of our life-saving products and want to make sure new firefighting tools work just as well as, if not better than, the current firefighting options on the market. Tyco's firefighting foam is used to quickly extinguish flammable liquid fires, or extremely high heat fires caused by oil or gas. In fact, the military used some of these products, which are blended to their specifications, in numerous emergencies over the years, including putting out the fire from the terrorist attack at the Pentagon on September 11, 2001.

Need for Next-Generation, Non-Fluorinated Firefighting Foam

The military still requires Aqueous Film Forming Foams (AFFFs) today for the safety of its personnel and equipment. Industry, research institutions and the U.S. Department of Defense are all actively researching next-generation non-fluorinated foam technologies that can meet the military's stringent requirements without the use of PFAS. No one has yet developed such a capability, but it is Tyco's goal to be the first.

Progress Thus Far

In fact, Tyco is already making progress in the development of nonfluorinated foams. In March 2021, the company debuted, under the CHEMGUARD and ANSUL brands, its latest safety innovation — NFF 3x3 UL201 Non-Fluorinated Alcohol-Resistant Foam Concentrate for use on limited hydrocarbon (gasoline) and polar solvent (like ethanol, acetone etc) fuel fires. It is well-suited for limited response to spills and smaller fires within facilities such as chemical factories or tank farms where fuel is stored.

The company's Research & Development Team is still working to develop a nonfluorinated form that will meet the military's specifications for AFFF.



COMMITMENT TO MARINETTE COMMUNITY

Tyco's \$11 million investment to build this facility in Marinette is a testament to our continued commitment to our employees and our community and provides a unique opportunity to demonstrate our technological and environmental leadership in the firefighting industry.

