Edwards Fiberglass, Sedalia, MO, has built more than 200 fiberglass tank liners for storage and underground burial of nuclear waste. They rely on the powerful strength and superior quality of Interplastic’s CoREZYN® VE8301 vinyl ester resin to fabricate the tank liners.

The circular tanks are seven feet in diameter and seven feet high. The fiberglass liner, manufactured by Edwards, is held in place with steel reinforcement rods then shipped to Concrete Products, Memphis, TN, for concrete casting. Jeff Davis, plant engineer, Concrete Products, said, “We went to Edwards after using another supplier. We had to have a very high quality product for these tanks.” Concrete Products pours a 12-inch layer of concrete over and around the liner. A lid is also formed at one end with a fiberglass liner and also covered with twelve inches of concrete. The finished tank weighs approximately 55,000 pounds and is a concrete cask with a vinyl ester composite lining.

The destination for the casks is the Oak Ridge Atomic Research Center near Knoxville, TN. There, these completed tanks are ready for storing nuclear waste.
a stainless steel circular tank filled with a high level of radioactive waste is placed within the cask and sealed for temporary storage at Oak Ridge. The ultimate goal is to receive approval to transport the casks across state highways to Arizona, for permanent placement in a salt mine hundreds of feet underground. When the mine is filled with the casks, explosive charges will be detonated above and below the mine, solidifying the salt around the storage area and forming a casket for all of the stored material. The tank construction project is supervised by Lockheed-Martin, the contractor hired by the U.S. Department of Energy to plan and oversee the work.

Interplastic Corporation is a specialty chemical company with its headquarters in St. Paul, Minnesota. It is focused on the production and distribution of unsaturated polyester resins, vinyl ester resins and gel coats for the composites and cast polymer industries.