Rudy enjoys a good challenge. A maintenance engineering manager for the Defense Waste Processing Facility (DWPF), he says that there are new challenges every day… challenges that he calls fun.

“DWPF is a fascinating facility that has the challenge of providing technical troubleshooting support,” says Rudy. “I have many opportunities to apply my data analysis skills to equipment maintenance and repair activities, which tap into my love for math and process trending.”

DWPF is the nation’s only operating vitrification facility. Vitrification, also called glassification, is the process of using extremely high temperatures to turn the highly radioactive sludge waste, combined with frit (a sand-like material), into a glass form. A melter is used to glassify the waste into borosilicate glass, which immobilizes it, and makes it suitable for safe, long-term disposal in stainless steel canisters.

To Rudy, the most challenging part of his job is learning the glass production process, as well as the function and purpose of all the facility’s equipment.

“Some of the people I work with have been in the area for over 20 years,” he says. “I am new to the facility, but it is fascinating to see the equipment work together.”

To tackle the daily challenges of a complex vitrification facility, Rudy says teamwork is dire.

“Working as a team is my strength and recommendation to solving problems,” he says. “One-hundred percent of the time, collaborating with others will provide many different possibilities to solving a single problem.”

The overall mission of Rudy’s company, Savannah River Remediation, is to reduce the risk of high-level radioactive waste stored at the Savannah River Site for the Department of Energy and the State of South Carolina. Rudy’s job in DWPF glass production supports this mission by providing engineering management support toward making sure the facility runs efficiently.

“Challenge keeps the work week exciting and interesting. It is also a test to a person’s character.”