

# MOX continues its work – onsite and off

SUBMITTED ARTICLE

The Mixed Oxide Fuel Fabrication Facility (MOX) at the Savannah River Site is a success story in many ways.

Its mission – converting surplus weapons-grade plutonium into fuel for nuclear power plants – is tied to a major nonproliferation agreement between Russia and the United States signed in 2000 and reaffirmed in a 2010 protocol.

Construction at MOX is a success story. When work began on the 600,000-square-foot complex, qualified nuclear engineers and other professionals were in short supply, as MOX was the first major nuclear project undertaken in years.

After a concerted effort of recruitment and training, the project developed a skilled workforce of 2,000 men and women who have now completed more than 70 percent of the work, including 90 percent of the physical structure that comprises 365,000 tons of concrete, rebar, pipe and other materials.

Construction safety is a significant success story that is a source of pride for executives, managers and workers alike. The MOX project has consistently been recognized for its safety record, at one point achieving 24-million work hours without a lost workday due to injury.

Currently, the project is surpassing 8.6 million hours and counting without a lost-workday injury.

National recognition of the project's superior safety record includes the Star Status awarded by OSHA's Voluntary Protection Program, the Safe Work Hours award from the National Safety Council and a Commendation of Excellence from the South Carolina Chamber of Commerce.

For eight years in a row the project has earned the highest designation in nuclear construction reviews from the Nuclear Regulatory Commission.

MOX employees' community support is also a continuing success story. Each year many of them have pitched in as community volunteers in addition to donating blood and contributing to worthy charities.

Beneficiaries of tens of thousands of dollars in annual employee contributions include Children's Place, the James E. Clyburn Research and Scholarship Foundation and CSRA Heart Walk.

The biggest success story is yet to come, and that is our community's contribution to the international drive against nuclear nonproliferation.

According to the terms of the agreement



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**Workers pour concrete in a section of one of the Gabion Walls at the Mixed Oxide Fuel Fabrication Facility. A Gabion Wall is an attached exterior wall with space in between that will be filled with various backfill material. Designed as a security feature, if the outside of the building is penetrated, the backfill material will collapse into the penetration.**

between the United States and Russia, each country will convert 34 metric tons of plutonium, enough for 17,000 weapons, into MOX fuel, preventing its reuse in nuclear weapons and keeping it out of the hands of terrorist organizations.

Turning the world's most powerful 'swords' into the most efficient and clean power-producing 'plowshares' will truly reduce the global nuclear threat.

The MOX project will add another chapter to the Savannah River Site's storied legacy supporting national security.



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**An aerial view of the Mixed Oxide Fuel Fabrication Facility.**