



Savannah River Site Watch

January 2019

Comments, Updates & Inquiries Welcomed

Obstacles and Concerns Related to “Repurposing” of the Abandoned Mixed Oxide Fuel Fabrication Facility (MFFF) at DOE’s Savannah River Site (SRS) to Production of Plutonium Pits for Nuclear Weapons

- Since there has been no public release by the National Nuclear Security Administration (NNSA) of an outline of plans about activities to shutter the Mixed Oxide Fuel Fabrication Facility (MFFF) at DOE’s Savannah River Site (SRS) in South Carolina, the public remains in the dark about MOX closure plans. A Freedom of Information Act request has been filed by Savannah River Site Watch (SRS Watch) for the “Statement of Work” that DOE has contracted with Savannah River Nuclear Solutions for project closure.
- There remains an unknown amount of construction problems that were unaddressed when construction on the MOX plant ceased. Public testimony and DOE documents and MOX workers have indicated a host of “rework” problems at the facility. It is unknown if an accurate list of such problems has been developed and how those problems - which involve such things as wall placement, piping, wiring, cable trays, pipe hangers and the HVAC system - would be addressed in any closure and “repurposing” of the building.
- Many questions remain about the role of NNSA and contractor CB&I Areva/Orano MOX Services and other contractor in the MOX project. Investigations and hearings about possible fraud, waste, abuse and mismanagement must be conducted by Congress and federal agencies before any repurposing of the MOX building is considered.
- NNSA has said in public documents that it intends to repurpose the MOX plant for pit production but no engineering basis has been presented for such a plan and if the MOX building, with uncorrected construction problems, could even be safely converted to pit production. A FOIA request has been submitted by SRS Watch for the “Statement of Work” between NNSA and Savannah River Nuclear Solutions for documents related to preliminary MOX facility conversion activities.
- Pit production at SRS would mean more controversial shipments of plutonium into South Carolina. In 2007, SRS was designated as the site to store surplus non-pit plutonium and currently stores about 13 metric tons of plutonium in the old K-Reactor. Given the demise of MOX and questions about the “dilute and dispose” method of plutonium disposition in the Waste Isolation Pilot Plant (WIPP), SRS is now stuck with that plutonium. Lawsuits in federal court in South Carolina and Nevada are addressing the requirement for risky and unjustified plutonium removal, initially 1 metric ton, from SRS to another DOE site (with lead candidate being the Device Assembly Facility at the Nevada National Security Site). Any new plutonium shipments to SRS for any reason will be met with public concern.

- SRS has no experience involving production of plutonium pits and their handling of pits. While SRS produced over 36 metric tons of plutonium in 5 reactors until they closed in the late 1980s, SRS shipped that plutonium for pit production to the now-closed Rocky Flats Plant in Colorado. SRS has recently been opening a few plutonium storage cans for monitoring and downblending for disposal in WIPP and has purified plutonium oxide in the H-Canyon reprocessing plant – that project has now ended – but has no pit production experience. Therefore, the site would be on a steep and stressful learning curve, which could set up the pit project for failure, leaving plutonium stranded at SRS.
- NNSA has so far refused to prepare any National Environmental Policy Act (NEPA) documents on the need for expanded pit production at SRS or other DOE sites and thus failed to analyze the environmental and health risks of pit production, including impacts of chemical and nuclear waste streams associated with pit production. A Programmatic Environmental Impact Statement (PEIS) must be prepared to address the need and impacts of expanded pit production DOE system-wide, followed by a site-specific EIS detailing specific impacts at the site. Both documents would involve public comments and hearings.
- Though MOX was always a parochial jobs program for the SRS area, pursuit of pit production to make up for jobs lost by MOX termination is no justification for a pit mission at SRS. Thankfully, it appears that the bulk of laid-off MOX workers have been able to find other jobs at SRS and Savannah River Nuclear Solutions, the main SRS contractor, has advertised that MOX workers have a preference in hiring.
- The Congressional Budget Office’s January 2019 *Projected Costs of U.S. Nuclear Forces, 2019 to 2028* estimates “about \$9 billion from 2019 to 2028 for expanded pit production capacity, although that estimate is very uncertain.” Spending \$1 billion per year on pit production - an amount likely to escalate based on past DOE performance - would place a severe strain on the DOE budget and result in elimination of better-justified projects.
- Over \$5 billion was wasted on MOX plant construction and possibly \$2 billion more was spent on planning and administration since MOX was conceived in 1995. This massive waste of taxpayer money and the mismanagement of the MOX project by NNSA and contractors looms as indicator of how another large, costly project at SRS will be managed. The MOX boondoggle must not be used to justify the hastily planned, unneeded pursuit of yet another complex, costly jobs project that could have the same negative results. Investigations into why MOX failed and if there was fraud, waste, abuse and mismanagement must precede any talk of moving pit production into the MOX plant.

Contact:

Tom Clements

Director, Savannah River Site Watch

1112 Florence Street

Columbia, SC 29201

tel. 803-834-3084, cell 803-240-7268, tomclements329@cs.com

<http://www.srswatch.org/>

<https://www.facebook.com/SavannahRiverSiteWatch>

This factsheet on SRS Watch website at: <https://tinyurl.com/y9wmkre5>

Aerial photos of MOX plant, Dec. 16, 2018: <https://tinyurl.com/y7ruvec8>