



SIERRA CLUB

SOUTH CAROLINA

THE SOUTH CAROLINA CHAPTER OF THE SIERRA CLUB RESOLUTION (2019)

OPPOSING DANGEROUS, DIRTY AND UNNEEDED PLUTONIUM PIT PRODUCTION FOR NUCLEAR WEAPONS AT THE US DEPARTMENT OF ENERGY'S SAVANNAH RIVER SITE

The US Department of Energy is considering a dangerous, dirty and unneeded new nuclear weapons role for the Savannah River Site near Aiken, South Carolina. That new mission - the Plutonium Bomb Plant - would entail production of plutonium "pits," or the spherical plutonium triggers for all US nuclear weapons. Pit production is complicated, dangerous, dirty and costly and would pose a host of new challenges at SRS, a site not suited for this work and where the focus must remain on clean-up of existing radioactive and toxic waste.

1. WHEREAS: The US Department of Energy's [Savannah River Site](#) (SRS) historically produced 36 metric tons of weapons-grade plutonium in five nuclear production reactors, and now stores 35 million gallons of high-level nuclear waste in corroding steel tanks as a by-product of such plutonium production. SRS continues to face the daunting task of managing that waste, outlined in the SRS ["liquid waste system plan."](#) Although 8 waste storage tanks are now closed, 43 tanks remain active. Removing the waste from them is the most urgent project now underway at SRS and merits full site attention and budget priority. Diverting limited budget resources to the plutonium pit mission may well divert site attention and funding from this uncompleted priority environmental clean-up project.

2. WHEREAS: SRS was designated in 2007 to be the site to store surplus weapons plutonium that was not removed from nuclear weapons, and currently [stores 12 metric tons of plutonium](#) in the old KReactor.

The disposition pathway for all that material has not been defined, which is of concern to the State of South Carolina. Plutonium pit production at SRS will likely result in yet more plutonium being brought into South Carolina, which could be stranded here if the complicated pit production project falters.

3. WHEREAS: In May 2018, the DOE's [National Nuclear Security Administration \(NNSA\)](#) issued a [news release](#) announcing that it had chosen SRS as the site to produce 50 or more plutonium "pits" per year for nuclear weapons. In spite of this declaration of intent, the SRS Plutonium Bomb Plant is not authorized or funded by Congress and the fate of the project will continue to be under discussion by the Armed Services Committees of both the House and Senate.

4. WHEREAS: NNSA has proposed production up to 80 plutonium pits per year at SRS and at Los Alamos National Lab in New Mexico. At SRS, NNSA claims the failed and shuttered plutonium fuel (Mixed Oxide or MOX) plant would be where production of 50+ pits per year would be located. The MOX project was formally terminated in October 2018, after a waste of \$5 billion on construction, and is rife with construction and design problems. According to various DOE reports, including the [summary to a classified report](#), the pit production project faces big challenges and the summary concludes that the "eventual success of the strategy to reconstitute plutonium pit production is far from certain."

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5. WHEREAS: Plutonium pit production has a host of nuclear and chemical waste streams, including



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transuranic (plutonium) waste, low-level radioactive waste and [beryllium](#) (which serves as a liner around the pit). Disposition paths for such dangerous wastes are unknown and some waste streams could remain on site permanently, adding to the existing SRS waste burden. The clean-up of existing waste at SRS must not be delayed or complicated by bringing in or creating yet more waste at the site.

6. WHEREAS: While SRS stores plutonium and has recently processed some plutonium into a powder (oxide) for the cancelled MOX fuel project, the site has not cast liquid plutonium since it produced plutonium ingots in the last-1980s that were shipped off site for pit production. SRS does not have the technical capability to cast plutonium spheres, which pose high risks of nuclear criticality accidents, worker exposure and environmental contamination.

7. WHEREAS: The last large-scale production of pits took place at the DOE Rocky Flats site, near Denver, Colorado. The site was closed in 1989 after an FBI raid due to illegal waste management practices. The [disastrous history of Rocky Flats](#) is a warning that the threat of nuclear accident, environmental contamination and worker exposure is high in the pit production process..

8. WHEREAS: An [“Engineering Assessment Report”](#) for DOE in April 2018 analyzed the SRS option and three options at Los Alamos and pointed out construction and schedule challenges to achieve a production rate of 80 pits per year by 2030. The life-cycle cost for use of the MOX plant for pit production was \$27 billion and all of the Los Alamos options were \$15 billion or more. Given that DOE has a record of failure with large, costly, complicated projects - witness the bungled MOX project - the cost is certain to rise dramatically and the schedule to slip significantly, placing the project at risk of abandonment if it were to be pursued. Such high costs will threaten the SRS cleanup budget, the main project at the site and its largest employer.

9. WHEREAS: Production of new plutonium pits is intended for the production of a class of new and refurbished nuclear weapons and could help stimulate a new nuclear arms race. The bulk of the new pits would be for new design nuclear missile warheads - designated the W87-1 and W76-1. No new nuclear weapons are needed and the [US currently has about 1750 deployed nuclear weapons](#), 2000 nuclear weapons in active reserve and another 2000 in storage. Deployment of new nuclear weapons would be a provocative act and undermine disarmament requirements of Article 6 of the [Nuclear Non-Proliferation Treaty](#).

10. WHEREAS: Public interest groups that monitor and educate the public on SRS and DOE issues have complained to DOE that proper National Environmental Policy Act documentation for pit production has not been prepared. [The groups have pressured DOE](#) to prepare various levels of NEPA documents and have forced [DOE to announce that it will conduct an Environmental Impact Statement](#) on SRS pit production. Public participation and comments must be considered by DOE on the costs and benefits of SRS plutonium pit production, including the need for pits for new nuclear weapons, the environmental impacts of waste streams involved with pit production, the risk of nuclear criticality, worker exposure and if the “no action alternative” (no new pit plant at SRS) should prevail.

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11. WHEREAS: Various public interest groups in South Carolina, including [Savannah River Site Watch](#), Carolina Peace Resource Center and the League of Women Voters of South Carolina, have opposed pit production at SRS and are encouraging more groups to join the effort to oppose this costly, complicated project.

NOW, THEREFORE, BE IT RESOLVED: That the South Carolina Sierra Club opposes the dangerous, dirty



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and unneeded DOE proposal to begin plutonium pit production for new nuclear weapons at the Savannah River Site in South Carolina; that the South Carolina Sierra Club urges the DOE to concentrate

its resources and personnel at SRS on its priority environmental clean-up mission, particularly on safely managing the 35 million gallons of high level radioactive wastes remaining from its historic plutonium production activities; and that the South Carolina Sierra Club encourages its members to actively participate in the DOE and any other available environmental review, legislative, administrative and permitting processes to object to this proposal for plutonium pit production for nuclear weapons at the Savannah River Site.

ADOPTED THIS 29th DAY OF JUNE 2019, BY THE EXECUTIVE COMMITTEE