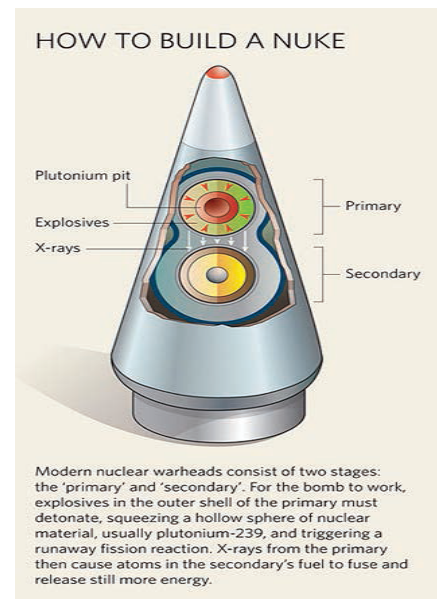


Expanded Plutonium Pit Production for U.S. Nuclear Weapons

Plutonium pits are the radioactive cores or “triggers” of nuclear weapons. Their production has always been a chokepoint of resumed industrial-scale U.S. nuclear weapons production ever since a 1989 FBI raid investigating environmental crimes shut down the Rocky Flats Plant near Denver. In 1997 the mission of plutonium pit production was officially transferred to its birthplace, the Los Alamos National Laboratory (LANL) in northern New Mexico, but officially capped at not more than 20 pits per year. However, in 2015 Congress required expanded pit production by 2030 whether or not the existing nuclear weapons stockpile actually needs it. This will support new military capabilities for nuclear weapons and their potential use.

As a key part of the planned \$1.7 trillion, 30-year so-called “modernization” of US nuclear forces, the Department of Energy’s semi-autonomous National Nuclear Security Administration (NNSA) plans to increase production to at least 30 pits per year at LANL and establish redundant production of 50 pits per year at the Savannah River Site in South Carolina. Citizens have defeated four previous attempts by NNSA to expand pit production, but the current effort is clearly the most serious threat. Nevertheless, expanded pit production still faces serious hurdles that have never gone away, including lack of true need, exorbitant costs, nuclear safety and radioactive waste issues, and legally required public review under the National Environmental Policy Act. Citizens can use these issues to stop unnecessary expanded pit production.



Schematic credit: Nature

Why Expanded Plutonium Pit Production Is Not Needed

- No pit production is scheduled to maintain the safety and reliability of the U.S. nuclear weapons stockpile. Instead future pit production is for speculative new-design nuclear weapons, so-called Interoperable Warheads claimed to operate on both land-based and submarine-launched missiles. This is a giant make-work project pushed by the nuclear weapons labs (principally the Livermore Lab). However, the Navy itself does not support these speculative Interoperable Warheads. (See <https://www.nukewatch.org/importantdocs/resources/Navy-Memo-W87W88.pdf>)
- Moreover, exact replicas of existing pits will NOT be built. Since pits cannot be full-scale tested under the current international testing moratorium, heavily modified pit designs could actually endanger national security by undermining confidence in nuclear weapons reliability. Or it could pressure the US to resume nuclear weapons testing, which would have severe international proliferation consequences.
- The U.S. government has offered no justification for the exorbitant expense and environmental and safety risks associated with expanded production, other than to say that it is an undisclosed military requirement. But expanded plutonium pit production will enable the ongoing evolution of the U.S. stockpile, giving nuclear weapons new military capabilities. This feeds the growing nuclear arms race with Russia and China and provides a terrible example as the US tries to keep other countries from acquiring nuclear weapons (such as North Korea and Iran).

- Independent experts have concluded that plutonium pits last at least 85 years, in contrast to the 45 years previously claimed by the government. The average age of plutonium pits in the active US stockpile is around 32 years. (See <https://www.nukewatch.org/facts/nwd/WeaponsAge.pdf>)
- At least 15,000 existing pits are already stored at the Pantex Plant near Amarillo, TX.

Related Issues

- The costs to the American taxpayer are astronomical. NNSA's FY 2019 Stockpile Stewardship and Management Plan estimates that the three types of planned Interoperable Warheads will cost ~\$45 billion over the next 30 years. A NNSA engineering assessment estimated that pit production for the Interoperable Warheads will cost around \$40 billion over 50 years. These estimates do not include related cleanup, environmental and health costs, which will also be huge.
- It won't be easy for the Los Alamos Lab to expand plutonium pit production, given local citizen opposition, legal requirements and problems of its own making, arguably due to its own incompetence. For example, LANL's main plutonium facility was shut down for over 3 years because of chronic nuclear criticality safety concerns.
- Further, in 2014 a radioactive waste barrel improperly prepared by LANL ruptured at the Waste Isolation Pilot Plant (WIPP) in southern New Mexico, contaminating 21 workers and shutting down the only repository for plutonium wastes from pit production for almost three years. Waste disposal at WIPP remains seriously constrained, even as there are increasing demands on its capacity from all across the country. It's not clear where all future radioactive wastes from expanded pit production will be disposed.
- Plutonium pit production will be a completely new mission at the Savannah River Site, raising new budget, safety, waste and environmental problems. Moreover, the Department of Energy is legally required to remove plutonium from South Carolina, not add plutonium because of pit production.
- Finally, the federal National Environmental Policy Act (NEPA) legally requires meaningful environmental review of expanded plutonium pit production, with the opportunity for public comment that the government must consider. First, we believe this legally requires a national programmatic environmental impact statement on expanded pit production to raise the cap of 20 pits per year sanctioned in 1996 and to begin pit production at a second site. Second, this then must be followed by site-specific NEPA reviews for both LANL and SRS. All of this could seriously delay expanded plutonium pit production and offer opportunities for citizen litigation. To date there is no sign that NNSA is initiating the legally required NEPA processes.

What You Can Do

Tell your congressional delegation what you think of expanded plutonium pit production. There is new opportunity in Congress as the incoming chair of the House Armed Services Committee (Rep. Adam Smith, D-WA) has expressed deep skepticism over the planned \$1.7 trillion nuclear weapons "modernization." It is especially important that New Mexicans convey their opinion of expanded plutonium pit production to their congressional delegation. In all cases, citizens should demand that NNSA conduct public comment processes for both national and site-specific environmental reviews before committing major funding to unnecessary expanded plutonium pit production, as legally required by the National Environmental Policy Act.

This fact sheet is available at <http://nukewatch.org/facts/nwd/PitProductionFactSheet.pdf>

For a history of successful citizen activism against expanded plutonium pit production see <https://nukewatch.org/facts/nwd/Pit-Production-History.pdf>

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