History of Statements on Pit Production Capacity

Compiled by Jonathan Medalia, Congressional Research Service, April 3, 2014

Number of pits per year	By (year)	Year of statement	Source
125-450	2020	2003	1
30-50	2012	2006	2
125	2022	"	"
50-80	2022	2010	3
up to 80	2022	2011	4
10	2019	2012	5
20	2020	"	"
30	2021	"	"
10	2019	2013	6
20	2020	"	"
30	2021	"	"
80*	2030*	"	"
30	2021	2013	7
50-80	longer term	"	"
10	2024	2014	8
30	2026	2014	9
50-80	2031	2014	10

Pit Production Ramp-Up Projections, FY2014 vs. FY2015

FY		Source 6: Timeline as of FY2014	Pit Type	Source 8: Timeline as of 2015	Pit Type
2014		8-10	DB	0	
2015		8-10	DB	4	DB
2016		8-10	PPI	5	DB
2017		8-10	PPI	5	DB
2018		10	Qual	5	PPI
2019		10	WR	5	PPI
2020		20	WR	5	PPI
2021		30	WR	5	Qual
2022				5	Qual
2023				5	Qual
2024				10	WR

DB: Development Build
PPI: Process Prove-In Build
Qual: Qualification Build
WR: War Reserve Build

Note: Only War Reserve pits are certified for use in the stockpile.
The other builds are to develop and qualify pit production processes and to support experiments for pit certification.

* "Preliminary plans call for pit production of potentially up to 80 pits per year starting as early as FY 2030." (source 6)

Source notes:

1 US DOE, Draft Supplemental Programmatic Environmental Impact Statement on Stockpile Stewardship and Management for a Modern Pit Facility, Summary volume, May 2003, DOE/EIS-236-S2, p. S-15, http://www.energy.gov/sites/prod/files/EIS-0236-S2-DEIS-Summary-2003.pdf

2 NNSA, Complex 2030: An Infrastructure Planning Scenario for a Nuclear Weapons Complex Able to Meet the Threats of the 21st Century, DOE/NA-0013, October 2006, p. 11, http://fissilematerials.org/library/doe06e.pdf

3 Memorandum of Agreement between the Department of Defense and the Department of Energy Concerning Modernization of the U.S. Nuclear Infrastructure, April 1 and May 3, 2010, p. 2, https://www.fas.org/irp/congress/2011_hr/nw-moa.pdf

4 "One main goal of the plutonium Sustainment Program is to ramp up to a production capability of up to 80 pits per year in 2022." NNSA, FY 2012 Stockpile Stewardship and Management Plan, Report to Congress, April 15, 2011, p. 147, http://www.ucsusa.org/assets/documents/nwgs/SSMP-FY12-041511.pdf

5 As approved by Nuclear Weapons Council in 2012. DoD, Assessment of Nuclear Weapon Pit Production Requirements, transmitted to HASC January 16, 2014, p. 4.

6 NNSA, FY2014 Stockpile Stewardship and Management Plan, June 2013, page 2-22, http://www.lasg.org/documents/SSMP-FY2014.pdf

7 Testimony of Andrew Weber, Assistant Secretary of Defense for Nuclear, Chemical, and Biological Defense Programs, in U.S. Congress. Senate. Committee on Armed Services. Subcommittee on Strategic Forces, Hearing to Receive Testimony on Nuclear Forces and Policies in Review of the Defense Authorization Request for Fiscal Year 2014 and the Future Years Defense Program, April 17, 2013, p. 15, http://www.armed-services.senate.gov/imo/media/doc/13-22%20-%204-17-13.pdf

8 NNSA budget briefing, slide "Plutonium Sustainment," provided by HASC. 10 War Reserve pits in FY2024.

9 " The priorities for the Weapons Activities appropriation are: … Execute a plutonium strategy that achieves a 30 pit per year capacity by 2026." DOE, FY 2015 Congressional Budget Request, Volume 1, National Nuclear Security Administration, March 2014, p. 64, http://www.energy.gov/sites/prod/files/2014/03/f12/Volume_1_NNSA.pdf

10 "DoD requirements call for a pit production capacity of 50-80 pits per year beginning in 2031." DoD, Assessment of Nuclear Weapon Pit Production Requirements, transmitted to HASC January 16, 2014, p. 4.