



Talking Points on Plutonium Pit Production at LANL: Presentation to the Radioactive and Hazardous Materials Committee

Background: New Mexico as America's Nuclear Colony

- Department of Energy's FY 2024 budget in New Mexico is \$10 billion (double next state).
 - 75% core nuclear weapons research and production programs
 - \$1.75 billion expanded plutonium "pit" bomb core production
 - \$464.3 million for dumping plutonium wastes at the Waste Isolation Pilot Plant
- New Mexico's entire FY 2024 state operating budget is 6% less (\$9.4 billion).
- Los Alamos County is 70.6% non-Hispanic White, 11th richest county in US, has most millionaires per capita. NM is minority majority (50% Hispanic, 11.2% Native American).
- Los Alamos County receives >\$50 million in annual state gross receipts taxes on LANL.
- Six surrounding county governments suffer net economic loss from the Lab's presence.
- Trinity Test Downwinders have yet to be compensated.
- Nuclear Regulatory Commission has approved permit to dump all high level wastes in NM.
- Expanding nuclear weapons programs sold as jobs, jobs, jobs.
- NM is 4th poorest state, per capita income has fallen from 32nd in 1959 to 47th in 2022.

The question needs to be asked, what good does expanding nuclear weapons programs do for the average New Mexican?

For more, see <https://nukewatch.org/wp-content/uploads/2023/06/New-Mexico-Americas-Nuclear-Colony.pdf>

Why Expanded Pit Production is Unnecessary

- LANL has been authorized since 1997 to produce 20 pits per year.
- The National Nuclear Security Administration (NNSA) is aggressively moving to produce 30 or more pits per year at LANL and 50 or more pits per year at the Savannah River Site in SC.
- No future plutonium pit production is to maintain the safety and reliability of the existing nuclear weapons stockpile. Instead, it is all for speculative new design nuclear weapons.
- Independent scientists called the JASONS concluded in 2006 that pits last at least a century. Their average age now is around 40 years.
- NNSA has avoided new pit aging studies since then. (As a footnote, the JASONS did a "letter report" in 2019 but explicitly said it was not a full pit aging study.)
- There are at least 15,000 existing pits stored at the Pantex Plant near Amarillo, TX.

Why Expanded Plutonium Pit Production Is Actually Harmful

- LANL already has substantial plutonium contamination which has spread in surface water as far as Cochiti Lake and is migrating vertically toward groundwater. See attached map.
- Pit production is exorbitantly expensive, >\$60 billion over 30 years at LANL and SRS.
- Pit production at LANL and SRS will add 57,500 cubic meters of transuranic wastes.
- Existing pit designs are being changed. This could degrade national security by introducing uncertainties into the extensively tested, proven nuclear weapons stockpile.
- Alternatively, it could damage national security by prompting the U.S. to resume testing, which would have grave international proliferation consequences.
- Unnecessary U.S. pit production for new-design nuclear weapons helps to fuel today's escalating nuclear arms race. This new arms race is arguably more dangerous and unpredictable than the first arms race because of multiple nuclear actors and new cyber threats, hypersonic weapons and artificial intelligence.

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Programmatic Problems with Pit Production

- The National Environmental Policy Act requires a new nation-wide programmatic environmental impact statement (PEIS) when there is new significant information. NNSA's last PEIS in 2008 did not consider simultaneous production at two sites (LANL and SRS).
- NNSA has begun a new LANL Site-Wide Env. Impact Statement (last one also in 2008) but is treating expanded plutonium pit production and its environmental effects as a done deal.
- NEPA public comments tangibly benefit the Lab and the public. Witness the 1999 LANL SWEIS whose analysis of wildfire risks proved crucial for the 2000 Cerro Grande Fire.
- 2019 Institute for Defense Analysis study: NNSA has never completed a project costing more than \$700 million in less than 16 years.
- DOE has been on the Government Accountability Office's High Risk List since 1991.
- GAO January 2023: NNSA has no credible cost estimates and no Integrated Master Schedule for expanded plutonium pit production, its most expensive and complex program ever.
- GAO August 2023: the cost to complete all five plutonium pit production projects at LANL could increase 30 to 40 percent (up to \$5.5 billion) and be delayed 2 to 4 years to Sept. 2032.
- Pit production at the Savannah River Site is already delayed to at least 2036 and has more than doubled in estimated construction costs to \$11 billion.
- Pit production at SRS could utterly collapse, as did SRS' Mixed Oxide Program. This could have a boomerang "surge production" impact on LANL, which NM should be prepared for.

The Waste Isolation Pilot Plant

- A senior NNSA official has described WIPP as the "Achilles heel" of pit production. WIPP is already oversubscribed for the future plutonium wastes that DOE wants to dump there.
- WIPP's mission is fundamentally changing from supporting DOE "cleanup" (as poor as it is) to direct support of NNSA's expanding pit production for new nuclear weapons designs.
- By 2036 plutonium pit wastes dumped at WIPP will far exceed cleanup wastes. DOE plans to use WIPP for disposing of nuclear weapons production wastes until at least 2050.

Some Basic LANL Cleanup Facts

- New Mexico's future lies with protecting water resources, not plutonium pit production. As late as the late 1990's, LANL claimed that groundwater contamination was impossible.
- In contrast, a 2005 Lab report: "Future contamination at additional locations is expected over a period of decades to centuries as more of the contaminant inventory reaches the water table."
- Lab's nuclear weapons budget has doubled over last decade. Yet cleanup remains flat at 6%.
- Former head of DOE EMLA falsely claimed in public that cleanup was >50% complete.
- GAO July 2023 report: Estimated cost of LANL cleanup explodes to \$7 billion from original \$2.7 billion and schedule is extended to 2043 from original 2032.

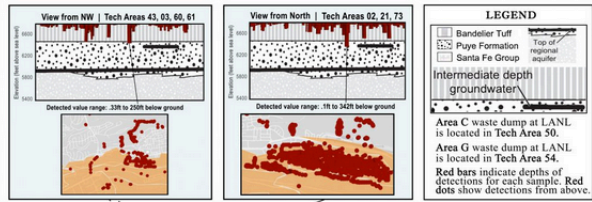
Recommendations: What New Mexico Can Do

- NMED's draft WIPP permit should be supported. It requires permit renewal every 10 years and an annual DOE report on its efforts (or not) for a WIPP replacement.
- NMED should rigorously enforce hazardous waste provisions with respect to pit production.
- Support NMED's lawsuit. Gutless 2016 Lab cleanup "Consent Order" should be terminated.
- Chromium contaminants should be flushed out at their source with treated groundwater.
- LANL plans to "cap and cover" radioactive/toxic waste dumps, leaving them permanently buried as a perpetual threat to groundwater, should be rejected, starting with Area C.
- NMED should compel comprehensive cleanup at LANL. That would be a win-win for New Mexicans, permanently protecting water resources while providing decades of high-paying jobs.

Sources: NNSA budget requests, 2006 JASON Pit Life Study, 2019 Institute for Defense Analysis study, GAO reports, LANL Intellus database, U.S. Census Bureau, UNM Bureau of Business and Economic Research, LANL's Hydrogeological Studies of the Parajito Plateau (1998-2004), 2016 LANL Cleanup Life Cycle Cost, 2020 NAS WIPP study. August 21, 2023

Detection of Plutonium-238/239 at Los Alamos National Laboratory

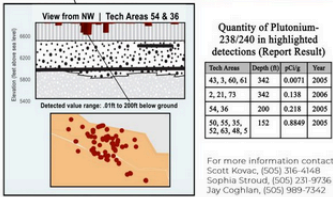
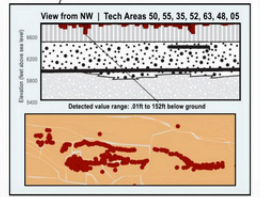
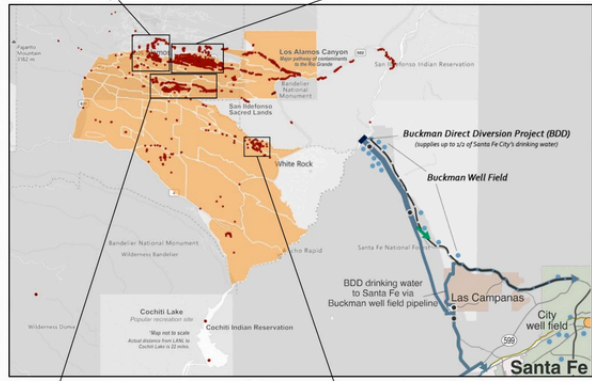
ALL DATA FROM LANL'S INTELIGUS DATABASE & PERIODIC MONITORING REPORTS



LEGEND

- Bandelier Tuff
- Puye Formation
- Santa Fe Group
- Top of regional aquifer
- Intermediate depth groundwater

Area C waste dump at LANL is located in Tech Area 50.
Area G waste dump at LANL is located in Tech Area 54.
Red bars indicate depths of detections for each sample. Red dots show detections from above.

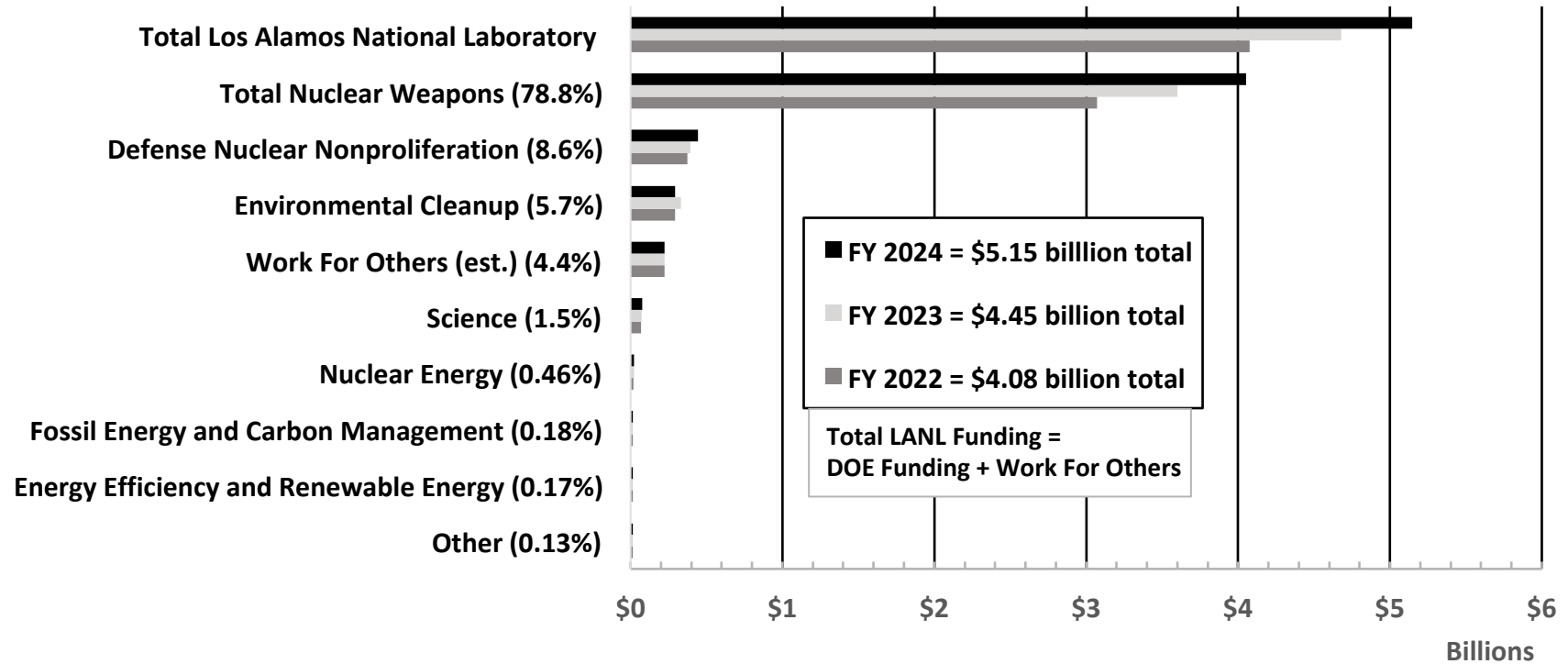


Quantity of Plutonium-238/240 in highlighted detections (Report Result)

Tech Area	Depth (ft)	PCN	Year
43, 3, 60, 61	342	0.0071	2005
2, 21, 73	342	0.138	2006
54, 36	200	0.218	2005
50, 55, 35, 52, 63, 48, 5	152	0.8849	2005

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Los Alamos National Laboratory FY 2024 Congressional Budget Request (In billions of dollars)



Notes: Given percentages are for total LANL FY 2024 budget. "Work For Others" is for other than the Department of Energy (e.g., Depts. of Defense and Homeland Security, the FBI, CIA, etc.) and based on past years is estimated at \$225 million annually. All other data are from annual DOE congressional budget requests.

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