



# Los Alamos Lab Site-Wide EIS Workshop

The Los Alamos Lab is radically expanding its nuclear weapons research and production programs despite a history of environmental contamination and nuclear safety issues. This Site-Wide Environmental Impact Statement offers perhaps the best public opportunity to demand transparency, accountability, and environmental justice.

**Introductory Remarks on the Need for Nuclear Disarmament:**

**Santa Fe Archbishop John C. Wester**

**Remarks on Plutonium “Pit” Production:**

**Dylan Spaulding, Senior Scientist for the Union of Concerned Scientists**

**Nuclear Watch New Mexico**

**Jay Coghlan, Executive Director (General Remarks)**

**Scott Kovac, Operations and Research Director (Cleanup and Air Emissions)**

**Sophia Stroud, Research Assistant (Tritium Releases and Biosafety Level-3 Facility)**

[www.nukewatch.org](http://www.nukewatch.org) [info@nukewatch.org](mailto:info@nukewatch.org)

# How to Provide Comments

We encourage you to formally comment on the Draft LANL SWEIS

## Four Public Hearings (With Two Virtual Options)

The two public hearings on **February 11** include virtual options. We encourage in-person attendance when possible.

**Tuesday, February 11, 2025 1:00-4:00pm and 5:00-8:00pm**  
Santa Fe Community Convention Center, Sweeney Ballroom  
201 W. Marcy St. Santa Fe, NM 87501

**Online: 1:30 pm-4:00 pm** <https://tinyurl.com/LANLSWEIS1>  
Meeting ID: 246 608 386 25

Access by Telephone: 719-283-1404 Phone ID: 409 573 1#

**Online: 5:30 pm-8:00 pm** <https://tinyurl.com/LANLSWEIS2>  
Meeting ID: 285 648 444 285

Access by Telephone: 719-283-1404 Phone ID: 818 405 462#

Verbal comment sign-up process not yet announced.

*All meeting times are Mountain Time.*

**Wednesday,  
February 12, 2025  
5:00-8:00pm**  
Mision y Convento  
405 N. Paseo de  
Onate  
Española, NM 87532

**Thursday,  
February 13, 2025  
5:00-8:00pm**  
Fuller Lodge, Pajarito  
Room  
2132 Central Avenue  
Los Alamos, NM  
87544

## Submit Written Comment

Email: [LANLSWEIS@nnsa.doe.gov](mailto:LANLSWEIS@nnsa.doe.gov)

### Written:

Mr. Stephen Hoffman, DOE/NNSA,  
3747 West Jemez Rd,  
Los Alamos, New Mexico 87544

*Please mark envelopes and  
emails as: SWEIS Comments*

**Comments must be received/  
postmarked by March 11, 2025.**

*NukeWatch will have sample  
comments available for your  
reference/use by February 25<sup>th</sup>.*

 **JOIN OUR MAILING LIST!**  
[nukewatch.org/join-our-mailing-list](http://nukewatch.org/join-our-mailing-list)

# Rigged game: LANL Site-wide EIS gives false choice between three scripted scenarios

- Expanded nuclear weapons programs (contradictorily called the “No Action Alternative”)
- Yet more expanded nuclear weapons programs (“Modernized Operations Alternative”)
- Yet far more expanded nuclear weapons programs (“Expanded Operations Alternative”). This is the National Nuclear Security Administration’s “Preferred Alternative” that incorporates all of the projects and programs of the previous two “alternatives” but adds still more.


All three alternatives revolve around expanded production of plutonium “pit” bomb cores, which NNSA argues is “No Action Alternative” because it was self-approved in previous lesser analyses under the National Environmental Policy Act (NEPA).

**Citizens should protest this!**

# Why bother commenting?

- ✓ NEPA produces valuable public information and increases transparency and accountability.
- ✓ NEPA processes sometimes lead to important litigation.
- ✓ NEPA processes can result in tangible benefits for the public and the government.
  - In response to public comment DOE included a detailed hypothetical wildfire in a 1999 final Site-Wide EIS and completed critical wildfire mitigation steps.
  - The hypothetical fire helped to persuade Lab management to order mandatory evacuation during the April-May 2000 Cerro Grande Fire which burned within a half-mile of ~44,000 barrels of radioactive plutonium wastes.
  - Afterwards the LANL public relations office said “When the Cerro Grande Fire swept down from the mountains this spring, these extra defensive steps, taken in response to the public comments, paid for themselves many times over. The savings were in the form of the harm to facilities that was reduced or avoided and reduced risk to the public that might have resulted.”



An aerial photograph of the Los Alamos National Laboratory complex, showing various buildings and parking lots, set against a backdrop of rugged mountains under a dramatic sunset sky with shades of orange, pink, and purple. A dark semi-transparent banner is overlaid at the top, and a smaller dark semi-transparent box is on the left side.

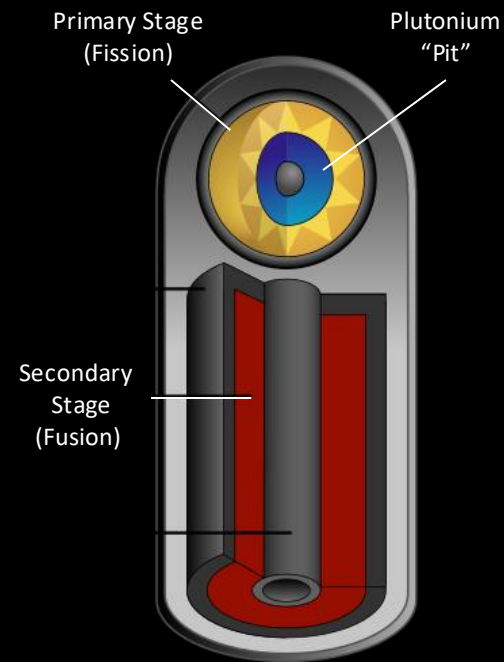
# { A rush towards plutonium pit production increases risk for all

Dr. Dylan Spaulding  
Senior Scientist, Global Security Program

[dspaulding@ucsusa.org](mailto:dspaulding@ucsusa.org)

“Restoring the ability to produce plutonium pits for primaries will guard against the uncertainties of plutonium aging in today’s stockpile and will allow new pit designs to be manufactured, if necessary for future weapons.”

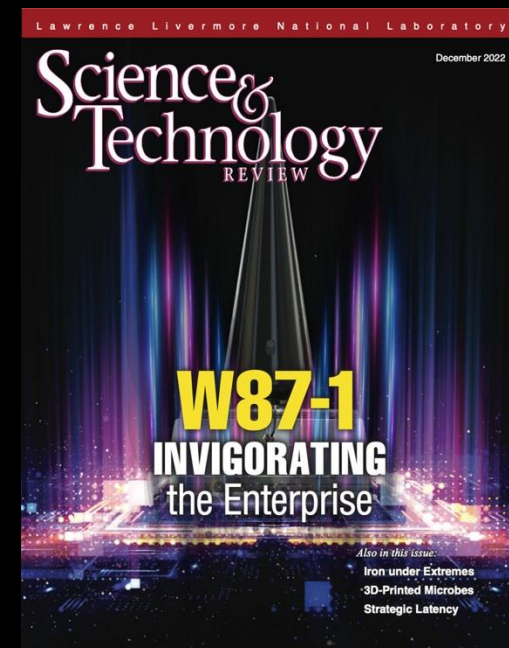
*DOE/EIS-0552, 1-7*



“Restoring the ability to produce plutonium pits for primaries will guard against the uncertainties of plutonium aging in today’s stockpile and will allow new pit designs to be manufactured, *if necessary for future weapons.*”

DOE/EIS-0552, 1-7

New pits from Los Alamos are, in fact, ONLY for *unnecessary* new weapons, not to take care of the stockpile we have.





# Experiments confirm that pit aging is *not* a motivation for new pit production



Accelerated aging experiments show no signs of run-away degradation on relevant timescales

Issues such as 'void swelling' and helium bubble formation have been shown to be of little or no concern over the anticipated service life of a pit



Plutonium pits are expected to have a life of at least ~85-100 years. The oldest pits in the existing stockpile are no more than 48 years old and the youngest are ~34 years old. (*JASON Committee, 2006; LLNL Science & Technology Review, 2012, 2015; Union of Concerned Scientists forthcoming report*)



# Experiments confirm that pit aging is *not* a motivation for new pit production

Experimental platforms developed for stockpile stewardship allow studies of Pu behavior over nearly the full-range of operational conditions within a weapon.

*Benchtop Tests*



*High pressure/temperature platforms*



*Subcritical Tests*



*Increasing Pressure, Temperature*

# Pit production will be the leading cause of radioactive waste generation from LANL

Pit production will lead to increases in low-level, mixed low-level, transuranic, and routine hazardous waste in the coming years.

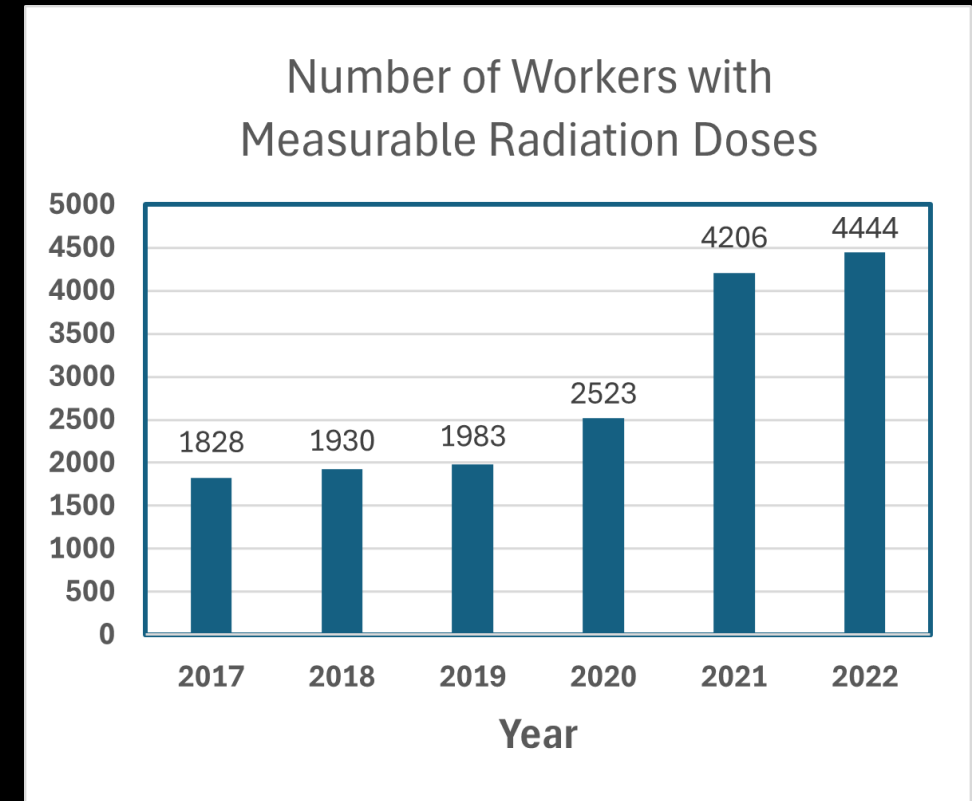
Transuranic waste production could *triple* if LANL pursues “surge capacity” pit production (up to 80 pits/year), which is not improbable.

Four *NEW* transuranic waste staging sites are proposed to handle waste from pit production and to “*minimize the potential for a long-term WIPP shutdown to affect pit production activities at LANL*”

Up to ~1500 shipments of waste offsite (of all types) would occur annually through 2038, including 219/year of special nuclear material, including plutonium.

# An unnecessary rush towards pit production increases risk to workers and the public

“Of the top 25 doses at LANL in 2022, 22 were accrued by individuals who conducted these plutonium facility operations. An increase in work at TA-55 led to an increase in the number of personnel across multiple shifts, contributing to the increase in the annual collective dose.” *(DOE/EIS-0552, 4-74)*



LANL has pushed back on engineering controls for its plutonium facility that could better protect the public from a severe accident.

# Weapons \$ = 79%

# Cleanup \$ = 6%

- LANL's budget for nuclear weapons programs has steadily grown to 79% of LANL's \$5 billion annual budget.
  - Budget percentage for weapons has more than doubled in the last decade.
- Cleanup has remained static at around 6% of the Lab's total budget.
  - Contrary to the spin that the Lab is growing increasingly diversified.





# LANL Plans to Leave Waste Behind

- The Site-Wide EIS does not mention plans to “cap and cover” the wastes.
- The Site-Wide must analyze the impacts of leaving the waste behind.



*(Note the lack of any liners, i.e. direct burial in soil)*

# Excavation of the Wastes Must Be the Remedy

- According to the independent Government Accountability Office, expected completion of Lab cleanup has been repeatedly pushed back, most recently to 2043 with an estimated cost of \$7 billion.
- But even this is a false cleanup given the Lab's plans to "cap and cover" some 800,000 cubic yards of radioactive and toxic wastes, leaving them permanently buried in unlined pits and shafts as a perpetual threat to groundwater.



# Lab's Continuing Push-Back on Cleanup

- As late as the late 1990s LANL was falsely claiming that groundwater contamination was impossible. In 2005 even the Lab acknowledged that **“Future contamination at additional locations is expected over a period of decades to centuries as more of the contaminant inventory reaches the water table.”**
- As the Lab has become more and more a nuclear weapons production site, it remains woefully ignorant over the extent and depth of the contamination it has caused to the regional groundwater aquifer. LANL also continues to downplay widespread plutonium contamination in soil, water and plants.



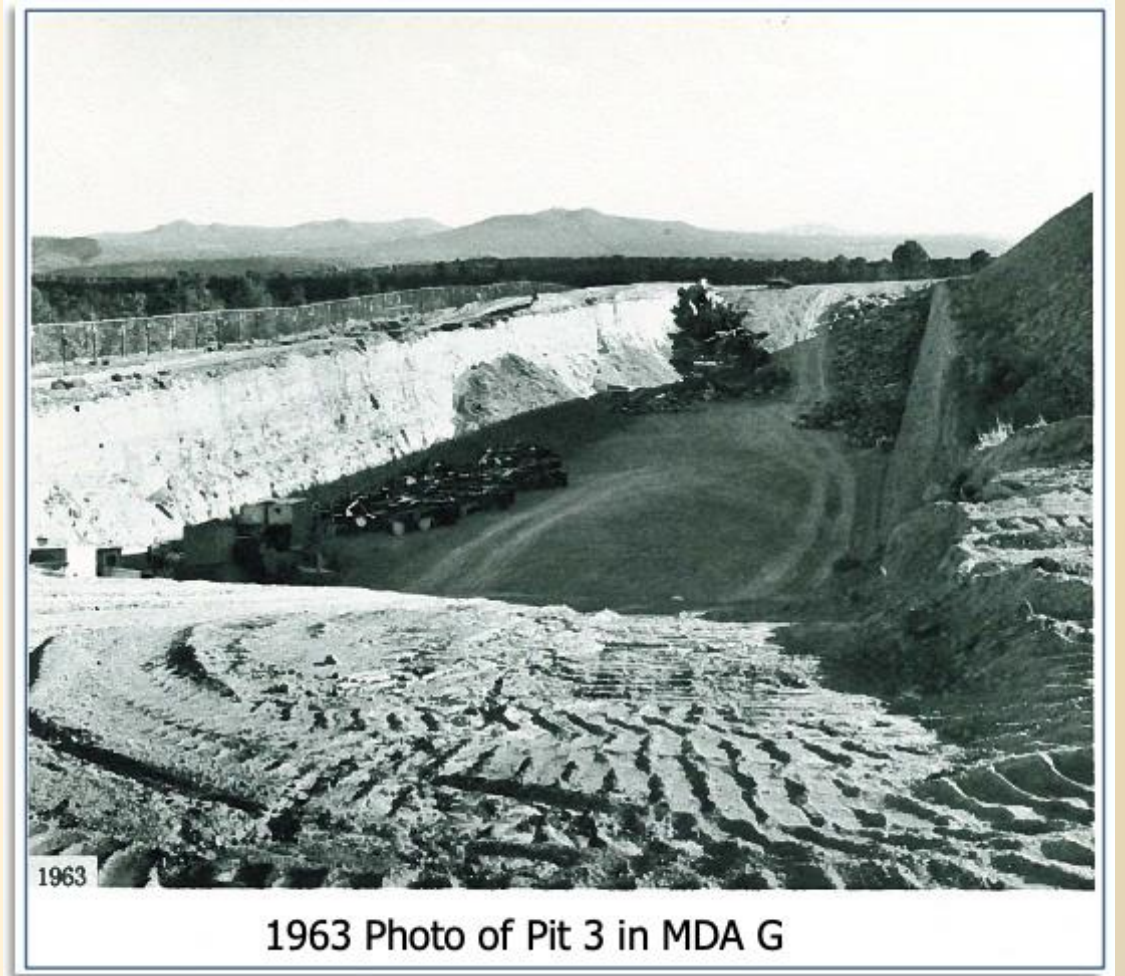
# Materials Disposal Area C Can Be Excavated

Between 1948 and 1974, MDA C was an 11.8-acre landfill with 7 disposal pits and 108 shafts for radioactive and chemical wastes.

The depths of the pits and shafts at Area C range from 10 ft to 25 ft below the original ground surface.

The total waste and fill in the pits and shafts are estimated at 198,104 cubic meters. The regional aquifer is approximately 1,332 ft below ground surface.

The New Mexico Environment Department has issued a draft order mandating comprehensive cleanup of Area C, which NukeWatch strongly supports. The Lab and DOE adamantly oppose it.





# Materials Disposal Area C Can Be Excavated

The Lab's estimate for "cap and cover" of Area C is \$12 million, versus an estimated \$805 million to fully exhume the wastes for offsite disposal.

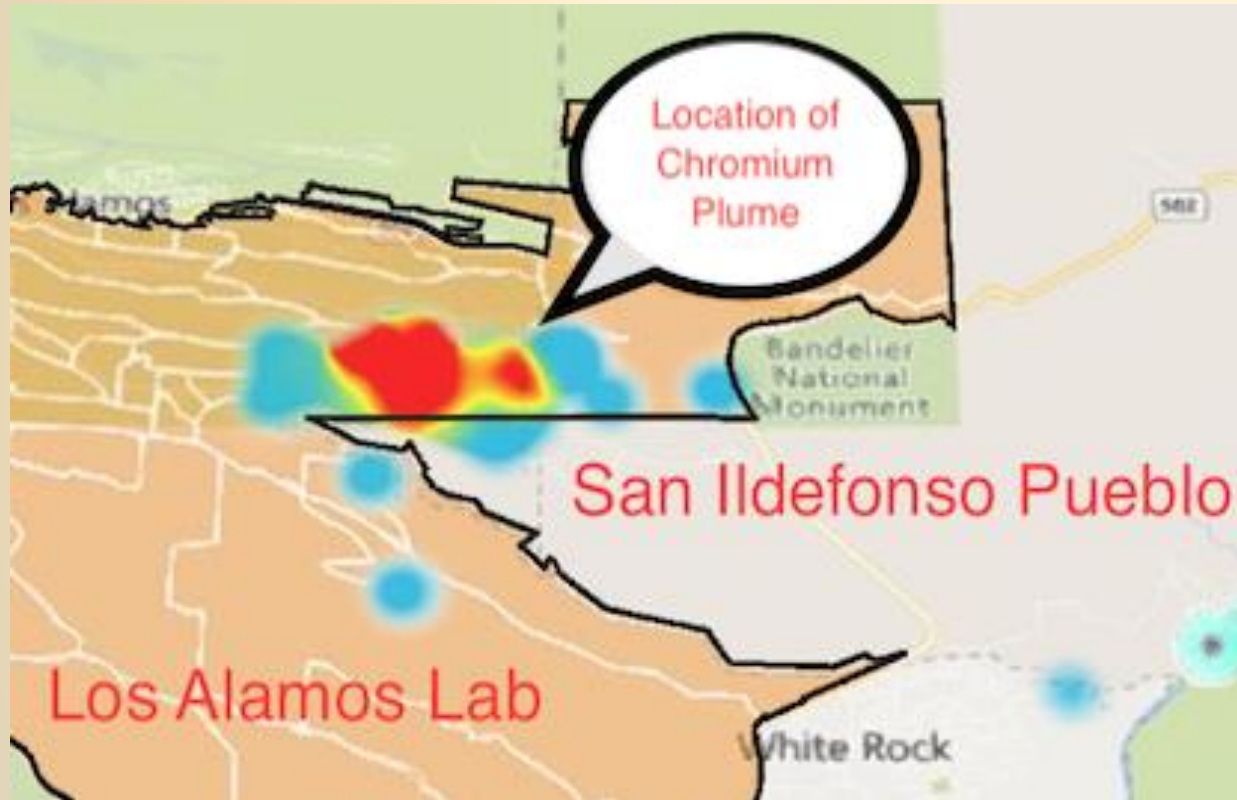
We compared the historic costs of removing wastes at three LANL sites. Excavation of MDA B cost \$136 million for 6 acres, or \$22.7 million per acre.

The Lab's estimate for Area C excavation is \$805 million for 11.8 acres, or \$68 million per acre.

We believe that estimate is excessively high simply because the Lab is against comprehensive cleanup.



# Chromium Plume Must Find a Remedy



- The Lab is taking credit for remediation of the Chromium Plume in the “No Action Alternative.”
- However, a recent Independent Technical Review failed to reach a conclusion on a Final Remedy.
- The Review for the first time confirms chromium contamination has migrated onto San Ildefonso Pueblo.
- At the present rate, it will take a century to remediate the Lab’s biggest environmental threat.



# Comprehensive Cleanup Would Benefit All

Genuine cleanup at LANL would be a real win-win for northern New Mexicans, permanently protecting our environment and precious water resources while providing hundreds of high paying jobs.

Cleanup should be prioritized, not unnecessary plutonium “pit” bomb core production!



*A worker suppresses dust during the final demolition stages of the historic DP West site, located at Los Alamos National Laboratory's (LANL) Technical Area 21.*

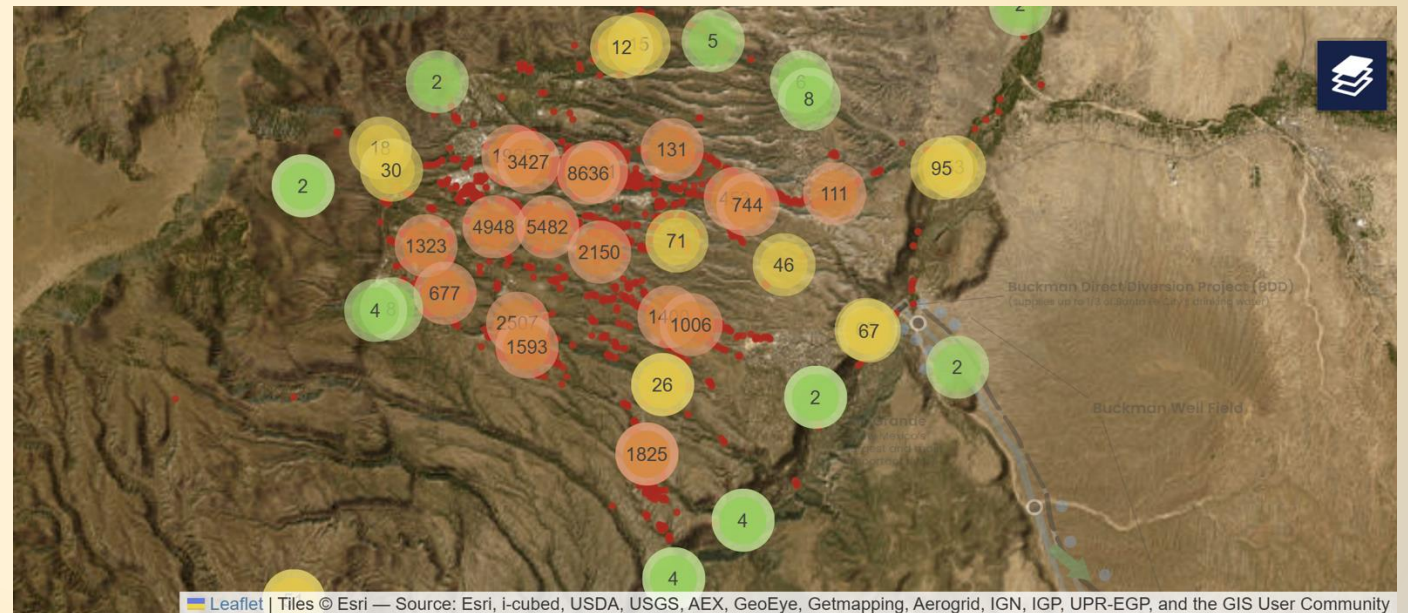
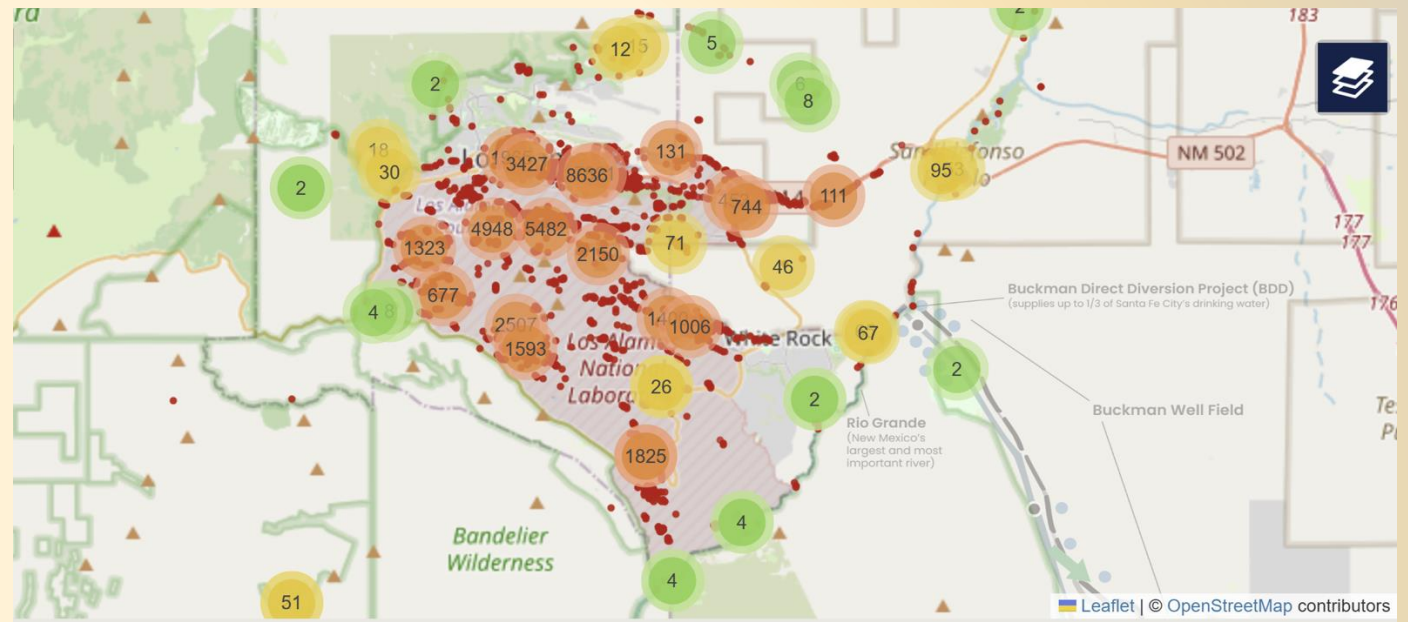
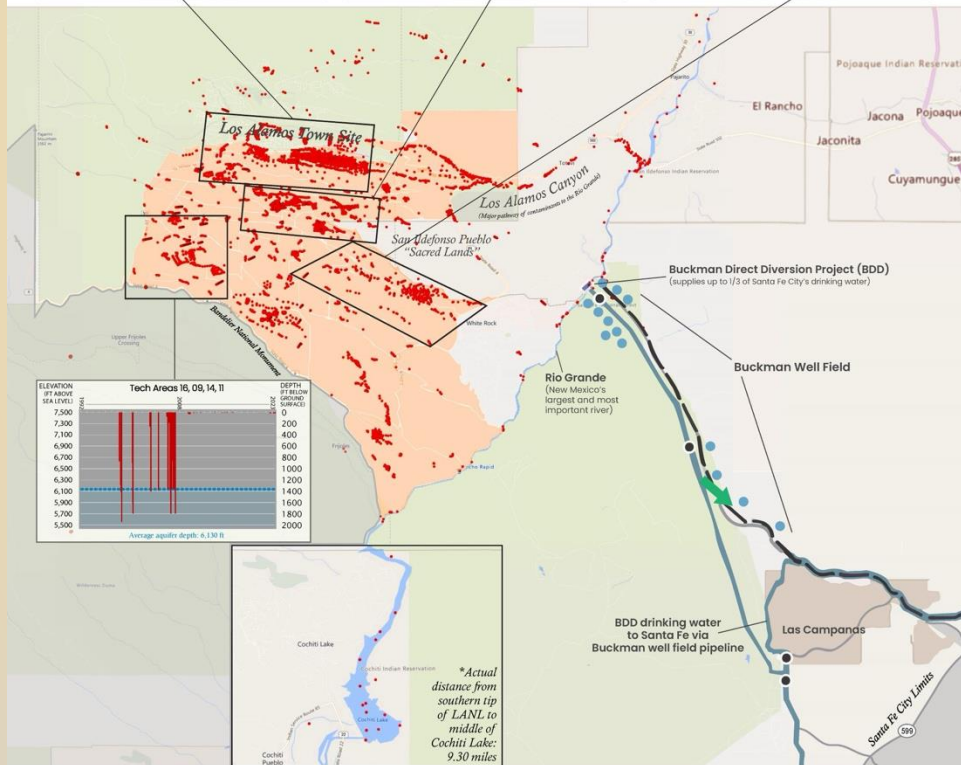
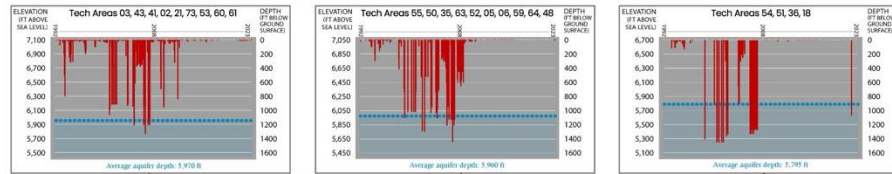
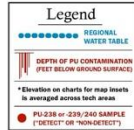
LOS ALAMOS NATIONAL LABORATORY, PUBLIC DOMAIN / WIKIMEDIA COMMONS



# Mapping Plutonium Contamination and Migration Around LANL

## Plutonium Sampling at the Los Alamos Lab Demonstrating Contaminant Migration to the Rio Grande and Groundwater

ALL DATA FROM LANL'S INTELLUS DATABASE [www.intellusnm.com](http://www.intellusnm.com)



See more at [nukewatch.org/issues/lanl-cleanup/](http://nukewatch.org/issues/lanl-cleanup/)



# Increased Annual Radioactive Air Emissions

As a result of expanding nuclear weapons research and production programs, the Site-Wide EIS states there will be an increase in annual radioactive air emissions **from 300 curies to approximately 2,750 curies** per year, not counting the 30,000 curies for the proposed tritium release.

**Table 5.5-7 Total Potential Radiological Emissions for the Expanded Operations Alternative (curies)**

<b>Tritium<sup>a</sup></b>	<b>GMAP</b>	<b>MFP</b>	<b>P/VAP</b>	<b>Am-241</b>	<b>PuEq</b>	<b>U-235</b>
1,850	1,454	100	3	$2.05 \times 10^{-5}$	$9.6 \times 10^{-4}$	0.164

Am-241 = americium-241; GMAP = gaseous mixed activation products; MFP = mixed fission products; P/VAP = particulate and vapor activation products; PuEq = plutonium equivalent; U-235 = uranium-235

a The Laboratory could have a one-time release of up to 30,000 curies of tritium from venting flanged tritium waste containers.

\*In 1997, a federal judge ruled that the Los Alamos Lab's radioactive air emissions were in gross violation of the Clean Air Act.

# Venting of Flanged Tritium Waste Containers (FTWCs)

## Key Facts:

- The venting could release up to **30,000 curies of tritium**, potentially resulting in an offsite radioactive dose of **up to 8 millirem**. The Clean Air Act maximum is **10 millirem per year**.
- The Lab claims this will be a **one-time event**, but other tritium containers exist. Will there be future releases? (*The Site-Wide EIS analyzes operations for the next 15 years*)

## Key Issues:

- Tritium exposure can cause **cancer, genetic mutations, birth defects, and other health issues**. There is **NO safe level of exposure**.
- **A significant amount of gaseous tritium** will condense as tritiated water vapor, which can bioaccumulate, even crossing the placenta.
- **LANL must fully justify the need for this action and consider** safer alternatives to protect public health and the environment. Demand transparency & independent health impact assessments.
- **Burdened communities** near LANL already face disproportionate health risks. Public comment on the Site-Wide EIS should help ensure impacted communities have a say.



The FTWCs are approximately 50 gallons in size and are stored in 85-gallon steel drums.

# Planned Biosafety Level 3 Facilities at LANL

In the preferred expanded operations alternative, LANL plans to construct a "BioSafety Level-3" facility that would handle bioweapons agents such as anthrax, reportedly for defensive purposes.

## Why a High-Security Biolab at a Secret Nuclear Weapons Lab is a Bad Idea

- **LANL's Safety Record:** The Lab has a long history of safety violations and concerns.
- **Bioweapons and Select Agents:** Working with dangerous pathogens at a secret nuclear weapons lab raises ethical, security and proliferation concerns.
- **Mixing bugs and bombs** is internationally provocative. Other federal agencies can do necessary defensive work.
- **Public and Environmental Risk, Emergency Preparedness:** LANL is relying upon a 2002 Environmental Assessment (itself based on a 1989 U.S. Army study) to evaluate risks for the new BSL-3 facility.
  - This outdated analysis fails to account for modern threats like artificial intelligence and increased terrorism risks—a comprehensive, updated risk assessment is called for. After all, the global COVID epidemic may have leaked from a Chinese biolab.



# Planned Biosafety Level 3 Facilities at LANL

## Demand Full Justification and Transparency

- **Why now?** NukeWatch sued for a full environmental impact statement in 2004 after which LANL dropped its previous BSL-3 proposal. The draft Site-Wide EIS does not adequately explain the facility's purpose, risks, or mitigation strategies.
- **Need full transparency** on what bioagents will be used and why.



A Biosafety Level 3 Lab at BRC of Qatar University (Wikimedia Commons). LANL proposes to acquire self-contained laboratory trailers that could be placed within available warehouse space and used for BSL-3 activities.



# New Transmission Line Across Environmentally and Culturally Sensitive Caja del Rio



Ownership map of the Caja del Rio showing the proposed transmission line route under consideration from the Norton Substation to the Los Alamos National Laboratory Switching Station.

# LANL's "Electrical Power Capacity Upgrade"

- An unprecedented coalition of Tribes, Hispanic community leaders and environmentalists submitted ~24,000 opposing public comments to the NNSA's and U.S. Forest Service's "environmental assessments."
- Increased Lab electrical needs are overwhelmingly for supercomputers and artificial intelligence work that will inevitably have nuclear weapons applications.
- The draft LANL Site-Wide EIS states that solar arrays with capacity up to 159 megawatts could be built. Moreover, this would defer nearly \$2 billion in "social costs of greenhouse gases" over 15 years.
- The Electrical Power Capacity Upgrade (EPCU) should not move forward until it and credible alternatives are fully analyzed in the LANL Site-Wide EIS.
- Simply put, future solar arrays make the highly controversial EPCU simply not necessary.

# How to Provide Comments

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