

PRESS RELEASE

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LANL to Rebuild Vault, Acquire Tons of Plutonium: Report Questions Need, Design, Environmental Analysis

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Santa Fe--The Los Alamos Study Group announced today the release of its review of Department of Energy (DOE) and Los Alamos National Laboratory (LANL) plans to rebuild the defunct Nuclear Materials Storage Facility (NMSF) at LANL to store up to 7.25 tons of plutonium in a single vault. The xx-page report, entitled *White Elephant Becomes Trojan Horse: The Renaissance of the Nuclear Materials Storage Facility at Los Alamos*, was written by Study Group consultant Dr. Scot Carlson and Director Greg Mello.

The report reveals that LANL intends to proceed with construction despite recent evidence of an active earthquake fault running near, if not directly underneath [recheck], the structure. Instead of preparing a fresh assessment of the environmental impacts of the facility based on this and other new information, LANL relies on an obsolete, 29-[check] page (double-spaced), environmental assessment (EA), prepared in 1987 without professional or public review.

LANL plans to reconstruct the ten-year old NMSF for intermediate- and long-term storage of radioactive materials, especially plutonium and highly enriched uranium (HEU). Current plans call for passive cooling of the nuclear materials canisters by unfiltered outside air. The "renovation" will cost at least \$56.7M (million), of which about \$10.7M [check] has already been spent. In constant dollars, this is about double the cost of the original building, which was built in 1987 at a cost of \$19.3M. Today's report includes DOE analyses suggesting that storage of plutonium in the NMSF is (by large margins) neither the cheapest, nor the safest, way to store that deadly element.

Upgrade of the facility is part of a suite of construction projects totalling \$1.4 billion, which together are designed to create at Los Alamos the capacity to manufacture the plutonium components ("pits") of nuclear weapons. Until 1989, that job was done at the Rocky Flats Plant near Denver. That facility is now too contaminated to use, after a history replete with fires, worker and public exposures, chronic in-plant and widespread environmental contamination, criticality concerns, and security lapses.

The NMSF is anticipated to play a role not just in the manufacture of plutonium pits, but in other plutonium processing missions as well. It would also support LANL's hoped-for role in the small-scale manufacture/prototyping of thermonuclear secondaries--the "H" in "H-bomb."

The report questions the wisdom of concentrating so much fissile plutonium and highly-enriched uranium in a single vault. A severe earthquake, intentional sabotage, or a terrorist attack could under some scenarios create a Chernobyl-like event that could release enough plutonium to permanently render large portions of New Mexico uninhabitable. [check]

The original NMSF was so poorly designed and improperly constructed that it has never been used to store nuclear materials. Problems included cracked concrete in floors, walls and the roof, a roof that did not meet seismic requirements, a ventilation system that circulated potentially contaminated air through the offices, and a loading dock designed so that plutonium

and other nuclear materials could only be delivered to the storage vault by removing them from their shipping containers and carrying them to the vault through the offices. LANL's plan is to begin by "gutting" the existing building.

In the proposed renovation, cooling of the heat-producing radioactive materials would be accomplished by cutting one hole in the wall at one end of the vault, cutting another one in the roof at the other end, and letting unfiltered air circulate through the storage array. Recent experiments indicate that this method may not work.

The announced capacity of the vault is 7.25 tons (6.6 metric tons) of weapons-grade plutonium, but the proposed design is capable of storing as much as 35 tons of plutonium. LANL states that its 199x plans for the expansion of the capacity beyond 7.25 tons have been abandoned.

There is no immediate need for supplemental storage at LANL. Current stores of about 3 tons (2.6 metric tons) of plutonium are kept in a vault in the basement of the Plutonium Facility (PF-4 at TA-55, to which the NMSF is connected by a tunnel). Unclassified sources suggest that about 3.5 tons (3.2 metric tons) of HEU are now kept in the basement of the CMR Building.

Smaller amounts of a variety of these and other radionuclides are stored at several other sites around LANL. These storage arrangements have satisfied LANL's needs during the ten years that the NMSF has remained vacant, not to mention the previous 43 years of the Cold War. The primary need for the NMSF is to facilitate weapon component production at LANL.

The poor project management exemplified by the NMSF is an ongoing problem at LANL, as illustrated by the current problems with the Chemistry and Metallurgy Research (CMR) Building Upgrade Project, which has been suspended because of cost overruns. Assistant Secretary for Defense Dr. Victor Reis wrote several congressional leaders that the causes of the "significant overrun situation" are several: "scope creep," a "lack of internal ownership of the project," "poor design work," and "no formality in the design change process."

He continues that most of the "problem is the result of weak management and poor design effort, which we are urgently addressing."

Reis's language is almost identical that used by DOE's Office of Inspections in 1993 in their study of the causes of the 1987 NMSF debacle: lack of a technical baseline for the facility; lack of cooperation of LANL organizations; lack of accountability in these organizations; failure to adequately use Laboratory nuclear expertise; and failure to incorporate comments into design documents. Discussing these findings, a 1997 report by the same office concluded that the original NMSF's fatal flaws were due to "poor design criteria and inadequate construction and project management."

It is not clear that the NMSF's "poor design criteria," let alone LANL's apparently endemic poor project management, have been corrected. Recent problems with the proposed NMSF redesign, discussed in today's report, warrant an examination of the project so that the public can review the proposals of the managers and designers who failed before.

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