

Plutonium could be missing from lab -- 600-plus pounds unaccounted for, activist group says

*This is a Makajani squawk once again. He is an activist group of one.*

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Enough plutonium to make dozens of nuclear bombs hasn't been accounted for at the UC-run Los Alamos National Laboratory in New Mexico and may be missing, an activist group says in a new report.

There is no evidence that the weapons-grade plutonium has been stolen or diverted for illegal purposes, the Institute for Energy and Environmental Research said. However, the amount of unaccounted-for plutonium -- more than 600 pounds, and possibly several times that -- is so great that it raises "a vast security issue," the group said in a report to be made public today.

The institute, which is based in Takoma Park, Md., says it compared data from five publicly available reports and documents issued by the U.S. Energy Department and Los Alamos from 1996 to 2004 and found inconsistencies in them. It says the records aren't clear on what the lab did with the plutonium, a byproduct of nuclear bomb research at Los Alamos.

A spokesman for UC, which manages the national laboratories at Los Alamos and Livermore for the Energy Department, did not address the report's specifics but said the New Mexico lab tracks nuclear material "to a minute quantity."

The report says there are several possible explanations for what happened to the plutonium. They include:

- It was discarded in unsafe amounts in landfills at the Los Alamos lab. It is legal to discard weapons-grade plutonium in landfills, one of which is 40 feet deep, as long as the substance is sufficiently diluted. However, if a landfill holds too much plutonium, the material can eventually contaminate the environment -- for example by leeching into groundwater or being absorbed by the roots of plants -- study co-author Arjun Makhijani said in an interview.
- It was shipped to an Energy Department burial site in a New Mexico salt mine, without accurate records of such shipments being kept.
- It was stolen or otherwise shipped off site for unknown reasons.

"If it has left the site, then it obviously has the most grievous security implications," Makhijani said. "I cannot say that it has left the site, but the government has the responsibility to ensure that it has not.

"And the University (of California) obviously has a responsibility in this. It should be a grave embarrassment for the university to be sitting on numbers like this and discrepancies like this, and not have resolved them."

UC spokesman Chris Harrington said Los Alamos "does an annual inventory of special nuclear materials which is overseen by (the Energy Department). These inventories have

been occurring for 20-plus years. Special nuclear materials are carefully tracked to a minute quantity."

The report concludes that at least 661 pounds of plutonium generated at the lab over the last half-century is not accounted for. The atomic bomb that was dropped on Nagasaki, Japan, in 1945 contained about 13 pounds of plutonium.

"The security implications . . . are extremely serious, since less than 2 percent of the lowest unaccounted-for plutonium is enough to make one nuclear bomb," the report said.

The problem of plutonium accounting began worrying lab critics in the mid-1990s, when Energy Department officials released lab records as part of the Clinton administration's openness initiative.

Critics found they had trouble determining exactly what the lab was doing with the plutonium waste that is generated during the manufacture of spherical plutonium "pits," the fissile triggers of nuclear bombs.

Makhijani said he and colleagues from two other activist groups hoped the problem would be resolved in August 2004, when they sent a letter of complaint to then-Los Alamos Director G. Peter Nanos. Nanos was trying to reform lab operations after highly publicized scandals over UC management of Los Alamos.

Nanos and lab officials did not respond, though, and nine months later Nanos left for a different job. Makhijani said he and associates had decided to make their report public to dramatize federal officials' failure to resolve the puzzle of the missing plutonium.

Makhijani received his engineering doctorate at UC Berkeley with specialization in plasma physics and nuclear fusion. The institute is funded by sources including the Ford Foundation and San Francisco's Ploughshares Fund.

UC has joined Bechtel National and other industrial partners in a bid to retain its contract to run Los Alamos, in a competition against a consortium consisting of Lockheed-Martin, the University of Texas, several New Mexico universities and various industrial partners.

Makhijani says he isn't taking sides in the competition but that he would prefer the weapons labs be run by industrial contractors rather than universities. The reason, he said, is that university connections to the weapons labs tend to lead to restraints on free inquiry and speech within the universities.