

Paper: Albuquerque Tribune, The (NM)
Title: Anti-nuke groups say funding is test-treaty blackmail
Date: April 18, 1998

The United States plans to spend \$60 billion during the next 13 years on nuclear weapons -- including spending at two national laboratories in New Mexico, a hefty sum that a coalition of anti-nuclear groups says is unnecessary and dangerous blackmail.

The report from the Project for Participatory Democracy challenges weapons proponents who it says contend this is the necessary price for scientific technology to replace the testing of warheads underground.

And it argues that it reflects unrealistic global strategic claims and assumptions and "too little skepticism toward (nuclear-weapons) scientists with obvious conflicts of interest."

The coalition is sending its report, "Stockpile Stewardship of Nuclear Weapons: The Deal to Subsidize Nuclear Weapons," to each member in Congress and other government policy-makers.

The booklet is the first "populist" assessment of the Department of Energy's complex science-based Stockpile Stewardship and Management Program, said coalition spokesman Bob Schaeffer of Belmont, Mass.

It was produced at the Tides Center in San Francisco and assisted by eight anti-nuclear and environmental groups, including the Los Alamos Study Group in Santa Fe.

Calling it a "citizens handbook," Schaeffer said the 30-page booklet aims to change U.S. nuclear-weapon policy through the education of Congressmen and ordinary citizens.

"There is nothing like this out there that you can read in a relatively brief sitting and get a fundamental and critical understanding of this country's nuclear-weapon policy," he said.

New Mexico's senior U.S. Senator Pete Domenici, who is chairman of the powerful Senate Appropriations Committee, said Friday that he could not contest the cost put forth by the report but may request a government analysis of it.

DOE spokesman Mathew Donnoghue said the department would comment once it has the chance to review the report.

DOE and its three nuclear-weapons labs -- Sandia and Los Alamos national laboratories in New Mexico and Lawrence Livermore in California -- have insisted that the large sums are needed even though the Cold War ended nearly a decade ago.

They say that the elaborate scientific research program can ensure the safety and reliability of aging nuclear weapons in lieu of underground nuclear testing that would be banned by the pending Comprehensive Test Ban Treaty.

The treaty has yet to be taken up by the Senate, despite President Clinton's request that it be confirmed this year.

The labs' traditional position has been that there is no sure substitute for nuclear testing -- that is actually detonating bombs underground at the Nevada Test Site.

But they say the next best thing for certifying the safety and reliability of the stockpile to the president is extensive laboratory simulations of actual testing.

The stewardship program includes a variety of complex and expensive nuclear-blast simulators at each of the three labs, combined with state-of-the-art supercomputers used to mirror, confirm and replicate those experiments mathematically.

But Schaeffer said the linkage to the test-ban treaty is "a smokescreen" intended to scare policy-makers into shelling out the money to sustain extravagant programs at the weapons labs.

Recently, DOE Deputy Assistant Secretary Robin Staffin and Domenici, an Albuquerque Republican, linked continued stockpile stewardship funding to the future of the test-ban treaty.

Describing the stewardship program as "fiscally constrained," Staffin said it is central to political approval of the test ban.

But Domenici said Friday that he's "not sure it's (the treaty) going to make it through the Senate" even with the stockpile-stewardship program.

Noting that passage requires a two-thirds majority, Domenici said many Senators simply "want to return to nuclear testing which is a whole lot cheaper." A test costs about \$10 million.

"The experts say that if you're not going to do testing, you have to do something like stockpile stewardship," Domenici said. "Essentially that's the trade-off."

But Schaeffer charged: "That's what we mean by the deal," adding that the treaty is being held hostage.

"No treaty unless we get our \$4.5 billion-a-year of radiation pork," he said. "That's the core of it."

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Author: Lawrence Spohn TRIBUNE REPORTER
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Paper: Santa Fe New Mexican, The (NM)
Title: Groups: DOE plans to make new nukes
Date: April 21, 1998

The Department of Energy's Stockpile Stewardship program, which is intended to maintain the country's aging nuclear weapons arsenal, is also in the business of developing new weapons and a newly declassified DOE report proves it, say critics of the program.

A 1997 report to Congress entitled "Stockpile Stewardship and Management Plan: First Annual Update" spells out DOE plans to gradually replace existing weapons with modified or new ones, develop new nuclear options for emerging threats, and maintain the facilities and technology to build new weapons at Cold War levels in case of a national emergency.

The report provides the most public detail yet on planned nuclear weapons projects by the federal government, according to anti-nuclear proliferation groups.

This document reveals "a shocking disregard for U.S. commitments, especially those enshrined in the Nuclear Nonproliferation Treaty to end the nuclear arms race," said Greg Mello, director of the **Los Alamos Study Group**, a Santa Fe-based DOE watchdog group.

The DOE has maintained that the program is within the requirements of the stockpile management guidelines mandated by the National Defense Authorization Act of 1994. Among the program's goals, according to the act, is "to ensure the preservation of the core intellectual and technical competencies of the United States in nuclear weapons, including weapons design, system integration, manufacturing, security, use, control, reliability assessment, and certification."

A spokesman at Los Alamos National Laboratory says the stockpile report reveals nothing new about the program that DOE officials haven't maintained all along.

"The lab is not currently developing new weapons and the stockpile stewardship program has always been clear on the need for eventual replacements of weapon components and even entire weapons systems," said LANL spokesman John Gustafson.

DOE officials in Albuquerque said personnel qualified to comment on the report were out of the office until later this week.

DOE released a declassified version of the report to a Washington federal court as part of a lawsuit brought against the Energy Department to stop production of nuclear weapon triggers at Los Alamos and the construction of the National Ignition Facility in Livermore, Calif. The suit was filed by a consortium of 39 disarmament and environmental organizations, including the **Los Alamos Study Group**.

Much of the report, also known as the "Green Book," remains classified. Among the items revealed in the declassified version are:

The DOE's plan to develop a supercomputer that can calculate 100 quintillion (that's 17 zeros) floating point operations per second to simulate nuclear testing of new weapons. Mello says that would be at least 10,000 times faster than the fastest experimental supercomputer operating today.

The DOE has an immediate plan to develop a computer to calculate 100 trillion floating point operations per second by 2004.

A program to provide a "continuum of warhead design options" to replace warheads on the Navy's submarine fleet and a provision for manufacturing these new warheads.

A LANL program to design and replace warheads for existing weapons that will be producible and certifiable without a nuclear test.

Maintain the capability to resume nuclear testing.

President Clinton signed the Comprehensive Test Ban Treaty in 1996 committing the United States to a moratorium on testing for the foreseeable future. A presidential directive requires the DOE to maintain the capability to conduct a nuclear test within 24 to 36 months of a request from the president should the U.S. find it necessary to renege on the treaty, according to the report.

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Author: RAY RIVERA
Section: Main
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Group: DOE Plans To Build Weapons

The Associated Press

An anti-nuclear group is blasting the U.S. Department of Energy over plans for replacing weapons in the nation's aging stockpile, but the DOE says its program meets federal requirements.

The Santa Fe-based Los Alamos Study Group contends a newly declassified 1997 DOE report proves the agency's stockpile stewardship program, aimed at maintaining the arsenal, also is in the business of developing new weapons.

The report reveals "a shocking disregard for U.S. commitments, especially those enshrined in the Nuclear Nonproliferation Treaty to end the nuclear arms race," said Greg Mello, director of the watchdog group.

The DOE says its program meets stockpile management guidelines mandated by the 1994 National Defense Authorization Act.

According to that law, the program is meant "to ensure the preservation of the core intellectual and technical competencies of the United States in nuclear weapons, including weapons design, system integration, manufacturing, security, use, control, reliability assessment, and certification."

John Gustafson, a spokesman for Los Alamos National Laboratory, said the report reveals nothing that DOE officials haven't said all along. The lab is involved in the stewardship program.

"The lab is not currently developing new weapons and the stockpile stewardship program has always been clear on the need for eventual replacements of weapon components and even entire weapons systems," he said.

DOE officials in Albuquerque are out of the office until later this week and were not available to comment.

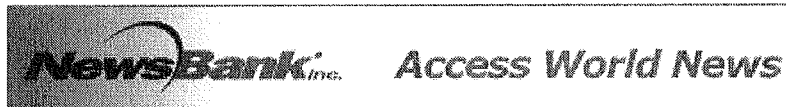
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Among the items in the declassified version:

- A program to provide a "continuum of warhead design options" to replace warheads on the Navy's submarine fleet and a provision for manufacturing the warheads.
- A lab program to design and replace warheads for existing weapons that will be producible and certifiable without a nuclear test.
- Maintain the capability to resume nuclear testing. President Clinton signed the Comprehensive Test Ban Treaty in 1996, committing the United States to a moratorium on testing. A presidential directive requires the DOE to maintain the capability to conduct a nuclear test within 24 to 36 months of a request from the president.



Paper: Washington Post
Title: OUR GROWING NUCLEAR STOCKPILE
Date: April 26, 1998

In his April 2 news story, "Lab to Make More Triggers for H-Bombs," Walter Pincus reprints the Department of Energy's stated reasons for resuming manufacture of plutonium pits ("triggers"): to ensure the "reliability" of the nuclear stockpile and to "prepare a reserve supply." But Mr. Pincus fails to mention that the United States already has a reserve supply of approximately 12,000 plutonium pits -- already tested and certified -- many of which can be reused if needed.

According to DOE and Los Alamos managers, none of these pits has become less reliable with time and will not do so for decades to come.

With its current equipment, Los Alamos can manufacture 10 to 20 new pits per year. To increase this rate to 50 pits per year would cost well in excess of \$1 billion, according to DOE's estimate. Worse, this billion-dollar project is described by DOE as merely a "demonstration module" for a facility six to 10 times larger. This year's budget request includes a down payment of \$67 million on this unnecessary and dangerous endeavor, the estimated costs of which already have more than tripled.

Those of us who have studied DOE's "stockpile stewardship" program hope that someone in Congress wakes up before signing off on this enormous folly.

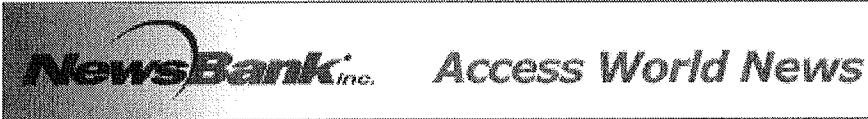
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The writer is a researcher at the **Los Alamos Study Group**, a disarmament and nuclear weapons policy research group.

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Paper: Washington Post

Title: NEW METHODS HELP MAINTAIN NUCLEAR ARMS

SOME AGING U.S. WEAPONS WILL BE REBUILT IN EFFORT TO ENSURE LONG-TERM RELIABILITY

Date: April 28, 1998

While the Clinton administration urges the Senate to ratify treaties that end nuclear testing and sharply cut the number of U.S. and Russian strategic nuclear weapons, U.S. government scientists are pressing ahead with new methods for keeping thousands of strategic missile warheads and bombs reliable and accurate for at least 25 more years.

The program, overseen by the Pentagon and Department of Energy (DOE), has begun rebuilding some of the approximately 9,000 nuclear warheads that remain in America's arsenal to keep the U.S. deterrent credible, in part by extending the life of some weapons.

For example, the Mark 21 reentry vehicles that contain the nuclear warheads on MX intercontinental ballistic missiles are scheduled to be taken off those ICBMs and refurbished to make them reliable beyond the year 2025, according to Gene Ives, deputy assistant secretary of energy for military applications and stockpile management.

In the 1980s, when the MX reentry vehicle and its 350-kiloton W87 warhead were first designed and produced, the two were expected to be deployed for 20 years, until 2009, according to documents.

The \$4.1 billion-a-year DOE stockpile stewardship and management program has drawn steady criticism from anti-nuclear groups for more than a year. The **Los Alamos Study Group**, a collection of 39 disarmament and environmental groups, last week again called for a halt in the program. Greg Mello, the group's director, said the DOE program reveals "a shocking disregard for U.S. commitments, especially those enshrined in the nuclear Non-Proliferation Treaty to end the nuclear arms race."

But Thomas Graham, a former senior official with the Arms Control and Disarmament Agency, said that without the DOE program, the 1996 Comprehensive Test Ban Treaty would have almost no chance for approval by the Republican-controlled Senate, where lawmakers have expressed concern about maintaining the U.S. capacity to wage nuclear war in an age when new limits are being placed on its aging arsenal.

Originally chosen for the MX in 1982, the Mark 21 and W87 nuclear warhead deliver a hydrogen bomb with an explosive power more than 25 times greater than the device that destroyed Hiroshima. Each of the 100 currently deployed MX missiles carries nine to 11 separately targeted Mark 21 reentry vehicles.

The Mark 21/W87 combination was chosen as the first nuclear weapon to be refurbished under the program because of its potential role after the ratification of START II, the reduction agreement awaiting approval by the Senate and the Russian Duma. That agreement calls for multiple warhead ICBMs such as the MX to be dismantled. According to Ives, the Mark 21/W87 "is the warhead of choice" for the new single-warhead Minuteman III ICBM allowed by the treaty.

Radioactive materials in nuclear weapons decay over time, and the plastic, metal and other organic parts in warheads and bombs age and react to radioactivity. "Material breakdown occurs from exposure to radiation, higher than normal temperatures and gases that accumulate over time in a hermetically sealed weapon environment," C. Bruce Tarter, director of the Lawrence Livermore National Laboratory, told Congress recently.

As a result, new techniques are being used to sample gases as an early warning of decay within the stockpile. In addition, a selection of the warheads and reentry vehicles, normally 11 systems a year, has regularly been tested every year, along with their missile and bomb delivery systems.

And although the stockpile is regularly certified to the president as reliable, there has never been a complete test of a nuclear ICBM from launch through space flight to nuclear explosion. No test H-bomb with a real warhead has ever been dropped from an airplane since the atmospheric test ban went into effect in 1964.

Before Congress approved a nuclear test moratorium and President George Bush suspended all U.S. underground testing in 1992, nuclear devices, based on past and future warhead designs, were regularly exploded in caverns beneath the Nevada Nuclear Test Site and at South Pacific test areas. These experimental explosions helped verify the reliability of the stockpile and provided data for future weapon designs.

To replace actual nuclear tests, Los Alamos and Sandia national laboratories have acquired advanced computers that will simulate nuclear explosions. Livermore has under construction the \$1.2 billion National Ignition Facility, whose immense laser capability will allow simulation of weapons-like fusion effects.

Under current schedules, the Mark 21s are to be taken off the MX and the W87 warheads sent to the DOE Pantex plant outside Amarillo, Tex. They will be taken apart there, with the plutonium triggers sent to Los Alamos in New Mexico and Livermore in California for examination. The remaining nuclear components of the bombs will be sent to Oak Ridge, Tenn., for study.

"We conceptually divide the explosion sequence into each of its parts and test and analyze each of these separately, much as you would test the ignition system, the cooling system and the brakes on your car," Victor H. Reis, assistant secretary of defense programs at DOE, told Congress last month.

There are fewer warheads and types of systems in the stockpile than at any time since the 1960s, when the nuclear arms race began in earnest. With seven nuclear missile and bomb systems now operational and the average age of each at 15 years, the U.S. stockpile "is older than ever before," according to a DOE publication.

"No signs of catastrophic aging" have been uncovered to date in DOE's more comprehensive stockpile stewardship program, according to Livermore's Tarter. There have been some unspecified problems, which officials said were promptly fixed.

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Author: Walter Pincus

Section: A SECTION

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Program Keeping Nuke Arsenal Primed

BY WALTER PINCUS
The Washington Post

WASHINGTON — While the Clinton administration urges the Senate to ratify treaties that end nuclear testing and sharply cut the number of U.S. and Russian strategic nuclear weapons, U.S. government scientists are pressing ahead with new methods for keeping thousands of strategic missile warheads and bombs reliable and accurate for at least 25 more years.

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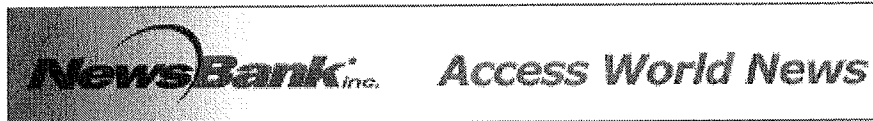
warhead were designed and produced, the two were expected to be deployed for 20 years, until 2009, according to documents.

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Albq. Jnl. 4-28-98



Paper: Santa Fe New Mexican, The (NM)

Title: Virtual testing Real doubt Activists say answer to age is new parts

Date: May 3, 1998

Since the stated purpose of stockpile stewardship is to maintain an aging arsenal, there has been tremendous debate about the extent to which aging can impair nuclear weapons.

Anti-nuclear activists say the answer lies in the past, and the message there is clear: relatively few aging problems have cropped up that would reduce a bomb's yield or increase the chances for an accidental detonation.

According to Department of Energy data obtained by Physicians for Social Responsibility and the **Los Alamos Study Group**, a Santa Fe organization, most of the defects that have been discovered were related to the aging of non-nuclear components or systems. Consequently, the groups say, the lion's share of the defects can be resolved by simply replacing parts that can be thoroughly tested, such as electronic circuits and batteries.

The nuclear parts that cannot be fully tested because of the test ban treaty have yet to exhibit flaws that would reduce their service life. But if doubts do arise, the activists say, the most cost-effective approach would be to remanufacture the part as close to the original specifications as possible.

"The DOE's vast and intricate plans for a capability to predict the effects of warhead aging on nuclear weapons performance are a costly solution to a nonexistent problem," concludes a recent critical report that anti-nuclear activists helped put together.

Supporters of the stewardship program say remanufacturing to original specifications isn't as simple as it sounds. They also say arguments based on the past aging record are meaningless because the arsenal of the past never grew old as weapons were replaced by new designs on a regular basis.

Weapons in the arsenal of the future will age beyond their design life. For DOE and the weapons labs, that amounts to sailing into uncharted waters.

"The real issue is not maintaining the stockpile next year. It's maintaining the stockpile 20 years from now," Vic Reis, assistant energy secretary for defense programs, said.

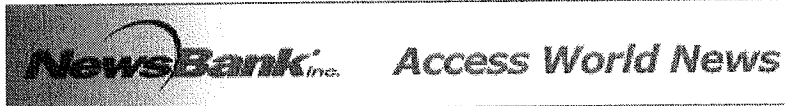
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Author: KEITH EASTHOUSE

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Paper: Santa Fe New Mexican, The (NM)
Title: Main
Date: May 5, 1998

After the end of U.S-Soviet arms race, activists fear new era of proliferation, but scientists say research is the essential to keep nuclear arsenal safe

For anti-nuclear activists like Marylia Kelley, the government's stockpile stewardship program presents a perception problem.

In the 1980s, it was relatively easy to drum up opposition to President Reagan's "Star Wars" dream of a space-based nuclear shield against Soviet missiles. In the 1990s, with the Soviet Union gone, the concern about nuclear holocaust has given way to less apocalyptic preoccupations such as El Nino, Microsoft stock and Bill Clinton's sex life.

But Kelley, who heads up the group Tri-Valley Cares out of her small apartment less than a mile from the gates of Lawrence Livermore National Laboratory, is doing all she can to spread the word: Nothing has changed.

The Cold War may be long gone. Almost 10,000 warheads may have been dismantled. And President Clinton may have signed an international treaty banning nuclear testing.

But the U.S. and Russia still have thousands of nukes pointed at each other. And American nuclear weapons labs like Los Alamos and Sandia in Albuquerque are still coming up with new ways to enhance the country's nuclear arsenal.

"It's a problem perception-wise," Kelley says, referring to the widespread public ignorance of the stewardship program and to the fact that one of its central goals is to keep the arsenal in a state of hair-trigger readiness.

"But when we tell people (about the program) they're outraged. They'll say 'I thought Livermore was converting (to nonweapons work).'"

That's why it's so hard for people like Kelley to see why nuclear weapons labs like Los Alamos and Sandia in Albuquerque are still working to enhance the U.S. nuclear arsenal.

As with so many other hotly debated issues connected to the Energy Department's stockpile stewardship program, the answer to why nuclear weapons should continue to be refined in the post Cold War-era depends on who's doing the explaining.

To nuclear weapons officials, the continued weapons work is critical to meeting what they say is the main purpose of stewardship: maintaining the safety and reliability of an aging arsenal in the absence of underground testing.

They say it is also crucial to ensuring that the nation maintain a cadre of skilled weapons scientists.

"Who will maintain the weapons if we don't have weapons scientists particularly 30 years from now when we're way beyond testing?" asked Vic Reis, DOE's man in charge of stewardship.

To nuclear critics, the weapons work is aimed at furthering evolution of the nuclear arsenal and as such flies in the face of the Comprehensive Test Ban Treaty, designed to halt the arms race.

"You can maintain expertise, but stewardship is about enhancing expertise," said Christopher Paine of the Natural Resources Defense Council, a Washington, D.C., organization opposed to stewardship.

The issue of ongoing weapons work is perhaps the most fiercely debated aspect of stewardship, the 10-year, \$45 billion effort to keep America's nuclear arsenal in a state of readiness.

At the heart of the debate are deep divisions over what is a "new" weapon, what constitutes weapons "development" and what is the best way to maintain the stockpile as weapons age beyond their design life.

The debate also raises this fundamental question: Should weapons scientists play only a custodial role over the existing stockpile? Or should they be free to make substantial changes, up to and including giving a bomb a new military capability?

A question of semantics

Officials at DOE and the weapons labs adamantly insist they are not developing new nuclear weapons.

What they mean is they don't have any formal orders from the Pentagon to develop new weapons. They also mean they aren't making changes to the nuclear explosive package that gives nuclear bombs their terrifying power.

Significant weapons work that falls outside these definitions is going on, however.

One new, or at least different, weapons system was deployed last year. While its nuclear core is unchanged, its casing has been modified so that it has an earth-penetrating capability. That weapon, the B-61-11, was jointly developed by Los Alamos and Sandia.

Sandia is also working on a follow-up earth penetrator that would have a new guidance system and would soar on wings like a glider after its release from a bomber. The purpose would be to enable a bomber to release the bomb from farther away, thus increasing crew safety.

Finally, Los Alamos and Sandia are seeking to craft a possible replacement for warheads carried by nuclear submarines, the first full-scale development of a nuclear weapon design since the end of the Cold War.

Part of this project involves a Los Alamos effort to determine whether a new warhead design can be introduced into the arsenal without undergoing full-scale nuclear testing.

Los Alamos spokesman Jim Danneskiold said this study is consistent with stewardship's goal of maintaining the arsenal.

"To do stewardship, the labs have to evaluate aging weapons components. At some point, aging effects may render components substantially less worthy of confidence than some sort of potential replacement."

Nuclear critics warn that all of these projects threaten to render the Comprehensive Test Ban Treaty moot which could lead other countries to decide that ratification is not in their national interest. India has already said it won't join the test ban because it believes the United States is flouting it.

"The CTBT is what keeps other countries from fielding nuclear weapons and if the world believes the treaty has become illegitimate because we are evading it, then other countries will not ratify it," said Greg Mello of the **Los Alamos Study Group**, a Santa Fe organization that has uncovered details about the weapons work.

Stewardship, CTBT: Can we have both?

The new weapons research is a particularly sensitive issue at the moment because the U.S. Senate may debate the CTBT later this year.

By banning nuclear explosive tests the only proven way of demonstrating that a bomb works the treaty seeks to halt the further development of nuclear weapons.

Nuclear critics say the weapons work clearly undermines this goal.

Last August, NRDC said in a report called End Run that the stewardship program including the weapons work "consciously seeks to render the CTBT a less effective constraint on the development and qualitative improvement of nuclear weapons than it otherwise would be."

Paine of NRDC said President Clinton's goal of having a robust stewardship program and a CTBT are fundamentally incompatible.

"The Clinton administration wants to have it both ways," Paine said in an interview. "They want to have a CTBT and have the weapons program continue full-steam ahead."

It is the stated policy of the White House, the DOE and even the military that no new nuclear weapons are needed in the post Cold War era.

Laboratory and DOE officials say they are not developing new weapons, just modifying existing ones. Such modifications are critical, the officials say, since without testing, weapons systems must remain in the arsenal beyond their design life.

As a result, the weapons work doesn't undermine the treaty, officials say, but actually makes U.S. participation in the treaty possible. The work enables the weapons labs to meet Clinton's requirement of a healthy nuclear deterrent under a test ban.

"The CTBT has a number of objectives, but the U.S. has not said that one of them is to reduce the reliability of its own weapons," said Kent Johnson, a top weapons scientist at Livermore.

Reis said the claim that ongoing weapons work undermines the CTBT is backward.

"This will allow us to do the CTBT," he said.

He said criticism about the weapons work is exaggerated because regardless of what the weapons labs do, a test ban can't help but significantly slow development work.

Stewardship supporters also say criticism ignores the fact that without testing the weapons labs would never certify new designs and the military would never deploy them.

To counter the claim that the weapons labs would never certify an untested weapon, activists point to the Los Alamos project to develop a plutonium "pit," or trigger, that could be certified without underground testing.

Labs and new weapons designs

This debate is particularly heated partly because the labs and the DOE have been reticent about the weapons development work.

That's where the anti-nuclear groups stepped in.

By piecing together information, Mello's study group brought the B-61-11 story to light. Mello's group also made an issue of the labs' work in crafting a replacement warhead for the nuclear submarine fleet.

More information came to light with the release last year of DOE's Green Book, which along with a newer version of the same document made public in April provides the most detail yet on planned weapons projects. The existence of this document was known to very few outside classified government circles until late 1996, when NRDC obtained the minutes of an August 1996 meeting that mentioned it.

Despite DOE talk of openness a buzzword under former Energy Secretary Hazel O'Leary information has trickled out about the weapons work. That has led to charges that the weapons labs are initiating weapons development projects on their own in the absence of Defense Department requirements.

There have been a couple of indications of this. One came in 1996, when an Internet document indicated that scientists at Los Alamos, Sandia and Livermore were engaged in new nuclear weapons work that was not being requested by the Pentagon.

According to the document, "concepts under consideration range in complexity from relatively minor modifications in the components of existing weapons to major changes in warhead subsystems, or to entirely new physics designs for a proposed or candidate weapon."

In other words, despite the stated policy against new weapons work, the labs were apparently dreaming up new designs just in case anyone was interested.

After the media found out about the document, DOE pulled it off the Internet.

Another indication that the labs are proceeding with weapons work is a letter last fall from Reis to the directors of the three weapons labs. The letter reminds the directors that they are under a statutory requirement to submit "weapons concepts and significant warhead modifications or development concepts" to a joint Defense Department and Energy Department panel.

When asked why Reis would write such a letter if the labs weren't working on new weapons projects, high-ranking DOE officials said in March that the purpose of the letter was merely to remind the labs of the statute. They insisted that the letter was not written in response to any specific lab projects.

Activists like Paine and Mello are skeptical. They believe the letter was written after Sandia pushed too far with its glide bomb project which they say did not originally have a specific DOD request to justify it.

Earl Whiteman, an official at DOE's Albuquerque Operations Office, said Sandia scientists merely did a "conceptual study" on the glide bomb "which is what we pay them to do."

Whiteman said the glide bomb project is presently dormant.

"There is no planned activity beyond the work (done) a year or two ago," Whiteman said.

Finding the center

While anti-nuclear activists and the weapons community are clearly polarized on the issue of ongoing weapons work, some observers are staking out some middle ground.

Ray Kidder, a retired weapons scientist from Lawrence Livermore National Laboratory in California and a prominent critic of the stewardship program, draws the line at giving a weapon a new military capability.

"If you're talking about providing new military characteristics, then I would say that's not within the intent of the CTBT," Kidder said.

Nevertheless, Kidder said he's willing to accept the B61 earth-penetrating modification because work on that began before Clinton signed the CTBT in September 1996.

"That was sort of grandfathered in," Kidder said.

Kidder said that as long as no new military capability goes along with it, he supports a plan to install a new kind of high explosive in Trident warheads to make them less accident-prone.

Kidder said that designing weapons and putting them on the shelf if needed could be beneficial. He said such work tends to be challenging and interesting and would allow weapons designers to exercise their skills and increase the chances that the weapons labs can attract a new generation of talented scientists.

"It would keep people on board doing things, chewing on a challenging problem, not just spinning their wheels. And I think it would help the labs get some pretty good people to come" on board in the future, Kidder said.

Continuing the fight

Meantime, Marylia Kelley isn't going to back off in her long fight to curb or even eliminate weapons work at Livermore the lab legendary physicist Edward Teller helped create in the 1950s to serve as a rival weapons lab to Los Alamos.

Maybe her fierce opposition has to do with the fact that when her 30-year-old son was a boy back in the late '70s, he used to play in an arroyo that Kelley later learned carried contaminated storm water from the lab when it rained.

Or maybe it's because Kelley now knows that a park that her boy used to romp in contains elevated levels of plutonium in the top 2 inches of dirt.

Or maybe it's not personal at all. Maybe it's simply that she says continuing to design ``new'' types of nuclear weapons when the United States is the only superpower is so obviously unneeded so obviously an effort to keep big money flowing to the weapons labs.

``I'd love to see stewardship defeated and then have the debate be on how many weapons do you want in the stockpile and how reliable do you want them to be," said Kelley, working from the kitchen of her apartment.

``Right now, we almost can't have that debate because stewardship is such an aggressive program."

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Author: KEITH EASTHOUSE, with photos by Clyde Mueller

Section: Main

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DOE Seeks More LANL Weapons Work

5/10/98

Employment Boost Could Reach 2,200

BY IAN HOFFMAN
Journal Staff Writer

Nuclear-weapons work at Los Alamos National Laboratory — along with its creation of nuclear and chemical wastes — will increase under a U.S. Department of Energy proposal due out next week.

Over the next 10 years, the federal weapons lab would hire almost 2,200 more full-time workers, dedicate itself to a greater weapons-building role and expand its graveyard of low-level radioactive waste.

Energy officials released a brief draft summary Friday of a new environmental-impact study for the

future of its Los Alamos lab.

The entire 5-inch thick study will not be available to the public until early next week. Public hearings are set for early and mid-June.

The study looks at four futures for LANL: running the lab more or less as it is today, reducing its weapons work, increasing its weapons work and a so-called "greener" future suggested by the public.

DOE proposes to increase lab weapons work, with more experimental explosions at its firing sites, more employment, more experiments with particle beams, more renovation of nuclear facilities and more wastes.

Environmentalists and disarmament activists were hardly surprised.

"The lab wants to continue to be the center of nuclear weapons production," said Todd Macon of the Santa Fe-based Los Alamos Study Group. "It's just their way of ensuring Cold War funding and Cold War tensions continue."

Lab officials could not be reached for comment late Friday afternoon.

The lab's weapons production work — mostly building nuclear triggers called plutonium pits — would increase from 14 pits to as many as 50 pits a year at normal rates.

It will require more lab workspace than LANL has inside its top-security plutonium facility at Technical Area 55. The new plan reaffirms lab proposals to turn a wing of the troubled Chemistry and Met-

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Plan Raises Weapons Work

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allurgical Research building over to work with higher quantities of weapons-grade plutonium. Safety concerns and an explosion closed the facility twice in the past two years.

The plan's call for LANL's discharges of liquid radioactive wastes into Mortandad Canyon, for example, would increase by 45 million gallons a year, or about a fifth over current releases, to 278 million gallons a year.

The lab's creation of low-level radioactive wastes will fill its current burial area at Technical Area 54 within 10 years, the study said. The increased lab operations would generate a fourth more of these wastes. These and other increased wastes would double waste hauling within the lab to 1,300 shipments a year. It would require expanding the low-level waste burials into two

new places at TA-54, where as many as 15 archaeological sites are located. The burial ground is on a mesa top close to the lab's eastern boundary with San Ildefonso Pueblo.

The lab also would generate an additional 10,600 cubic feet of mostly plutonium-contaminated and mixed radioactive-hazardous wastes a year — roughly 800 drums more than current waste generation — all likely to be buried at the Waste Isolation Pilot Plant near Carlsbad.

Copies of the study can be obtained by calling (800) 898-6623 or writing Corey Cruz, EIS Project Office, U.S. Department of Energy, Albuquerque Operations Office, P.O. Box 5400, Albuquerque, N.M. 87185-5400.

The DOE is taking public comment from May 15 to July 15 and has set public hearings for June 9 in Los Alamos, June 10 in Santa Fe and June 24 in Española.

U.S. Fingerprints on India's

Indian Scientists Visit LANL Often

BY IAN HOFFMAN
Journal Staff Writer

As President Clinton condemns India's nuclear tests and labors to dissuade Pakistan from exploding its weapons, the United States faces a nagging question: What role might U.S. industry and weapons scientists have played in building the Indian and

Pakistani bombs?

Consider this:

- Next to Russia and China, India sends more scientists to study in the three U.S. nuclear weapons labs than any other "sensitive" country suspected of pursuing or refining nuclear arsenals. Los Alamos National Laboratory ranked as the most desired destination: It hosted 407 visiting Indian scientists from 1994 to 1996.

- IBM — supercomputer supplier to one U.S. nuclear weapons lab — has sold a powerful supercomputer to a suspected Indian weapons facility under the Clinton adminis-

tration's relaxed export controls for high-performance computers. The Indian Institute of Science's IBM SP2 is thousands of times more powerful than the computers used to design all of the warheads and bombs in the U.S. nuclear arsenal.

- Intelligence reports from the early 1980s warned that India was studying inertial-confinement fusion — a laser-fusion field led by U.S. weapons scientists — to aid in the design of thermonuclear weapons. In 1981, U.S. government arms-control analysts cautioned the weapons labs that their open inertial-confinement fusion research

Nuclear Weapons

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risked helping other nations design the kinds of "boosted" fission weapons and thermonuclear weapons that India successfully detonated last week in the Thar Desert.

Indian scientists proudly insist they had little outside aid in developing their nuclear arsenal, unlike the Soviet Union's theft of the Trinity bomb design from Los Alamos or China's gift of a tested design to Pakistan in the early 1980s.

Yet experts in nonproliferation and disarmament fear U.S. nuclear-weapons science — however inadvertently — drew India a

roadmap to creating a nuclear arsenal with a minimum of actual nuclear-explosive tests.

U.S. weapons scientists also are publishing high-energy physics data and computer codes that are highly useful in weapons design.

India's learning curve suggests its scientists have not operated in a vacuum: They went straight from a single fission, or A-bomb, test in 1974, code-named "Smiling Buddha," to the claimed detonation of a thermonuclear weapon last week. By con-

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U.S. Fingerprints on India's Nuclear Weapons

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trast, Los Alamos scientists exploded 32 nuclear devices before achieving a full thermonuclear explosion.

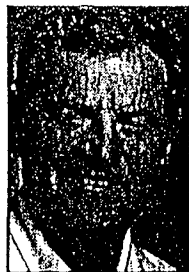
"They didn't get all this by themselves. They've benefited from the scientific community and from our own nuclear weapons laboratories," said Christopher Paine, a senior weapons analyst at the Natural Resources Defense Council in Washington, D.C.

Stockpile stewardship — the U.S. government's \$45 billion blueprint for keeping its nuclear arsenal ready — could, in Paine's opinion, be the "greatest proliferation debacle" since President Eisenhower's Atoms for Peace plan. India, Pakistan and more than 30 other countries gained nuclear reactors — a crucial start-up tool for a nuclear arsenal — and were schooled by U.S. scientists in nuclear physics, chemistry and metallurgy.

American technicians not only taught Indian scientists how to harvest plutonium from those reactors, but also designed and helped build India's first plutonium-processing plant.

"The history of nuclear proliferation is the history of the U.S. shooting itself in the foot. It's like the cartoon character Pogo: 'We have met the enemy, and he is us,'" Paine said.

It is no coincidence that Indian and U.S. nuclear weapons labs are simultaneously shopping for computer power: Supercomputers are the new nuclear test grounds now that the world frowns on nuclear explosions. In essence, the right computer codes and physics data to confirm them could pose as great a danger as, say, weapons-grade plu-



BROWNE: "It's a different world than it was in 1945..."

tonium.

Now, under the rubric of "technical deterrence," U.S. nuclear-weapons scientists are going public with fusion experiments and design codes that bear close similarity to data and design codes for nuclear weapons.

'It's a different world'

India incidentally announced that its five nuclear blasts this month "are expected to carry Indian scientists towards a sound computer simulation capability."

After a press inquiry last week, the labs' overseer, the U.S. Department of Energy, instructed Los Alamos officials not to reveal information about visiting Indian scientists and where they worked in the laboratory.

But earlier, the lab said none of the 42 Indian nationals at LANL are working on weapons research.

The vast majority work in non-classified, basic research programs, leading with theoretical biology, biology and geology. Two Indian graduate researchers create computer models inside the lab's X Division, the part of Los Alamos responsible for nuclear weapons design. But they have no security clearances, and lab officials say all visiting foreign scientists are physically fenced off from weapons-science areas at the lab.

"What we do is treat everyone from a sensitive country as though they were spying," lab director John Browne said recently.

But, he added: "It's a different world than it was in 1945, 1950. ... The techniques (of nuclear weapons design) are out there anyway."

Still, nonproliferation experts say LANL's embrace of scientists from countries wishing to develop nuclear weapons sounds risky.

"I think it's unlikely American laboratories will knowingly have given Indian scientists access to nuclear weapons secrets," said Tariq Rauf, a nonproliferation expert at the Monterey Institute's Center for Nonproliferation Studies.

But, Rauf noted, "these scientists being in proximity to their American peers can engage in conversations or perform computational modeling that could elevate their expertise to take back to their mother country."

Going to Los Alamos or Lawrence Livermore labs is hardly necessary; U.S. weapons scientists are taking their research into the open.

A Lawrence Livermore scientist, for example, openly compared nuclear test data and laser-fusion measurements during a physics conference last November in Pittsburgh.

To recruit public universities to help in computer simulation, weapons scientists have openly mapped out the network of physics experiments they are weaving into weapons simulations.

"That's a Manhattan Project in itself," said the Natural Resources Defense Council's Paine. "But the component parts of the project and the way they relate to each other are unclassified. They're pretend-

ing there aren't people out there smart enough to integrate these parts."

'Scientific deterrence'

The information flow from the U.S. nuclear weapons labs could accelerate. Once able to prove American nuclear supremacy by "shaking the ground" with nuclear explosions, U.S. weapons scientists plan to increase publication of their laser-fusion and pulsed-power experiments — both key components of weapons science — to deter potential nuclear aggressors.

Los Alamos' chief nuclear weaponeer, Steve Younger, has urged his scientists to carry their unclassified research to peer-reviewed journals and scientific conferences.

"Foreign scientists see us at conferences, see that we are doing work at the leading edge," Younger wrote in the December 1996 edition of "Weapons Insider," an internal lab newsletter. "Our presence in the scientific community is not 'publish or perish' — it is the visible demonstration of capability, what might be termed scientific deterrence. It is part of our job."

Such frank talk about sharing science closely related to weapons design astounds disarmament and nonproliferation activists.

"It's not just talking about it, they're doing it," said Greg Mello, head of the Los Alamos Study Group in Santa Fe.

Said nonproliferation analyst Mike Veiluva, counsel for the Western States Legal Foundation: "This is the real problem we're going to have in the 21st century, not just with the U.S. labs but also the French labs and the Russian labs."

LANL Mum on Plan To Detonate Plutonium

5/28/96

Foes fret

The small chance of a plutonium accident concerns activists **A2**

BY JOHN FLECK
Journal Staff Writer

Los Alamos National Laboratory and the Department of Energy have draped a veil of secrecy around plans to detonate plutonium at Los Alamos.

Behind the veil is the question of whether the department and the laboratory plan to build and detonate full-scale replicas of nuclear weapons, down to the radioactive plutonium at their cores.

The department and the lab acknowledge that they plan to use explosives to detonate plutonium inside steel vessels. The purpose, they say,

is to study how the plutonium behaves at high temperatures and pressures.

The DOE also acknowledges plans to build mock bombs with uranium and other metals substituting for the plutonium.

But the DOE refuses to say whether those two ideas will be combined — tests using a full-scale plutonium mockup of a nuclear weapon.

Arms control activists believe the agency is planning plutonium mock weapons tests, which they say would have serious arms control implications.

By using a rare type of plutonium, lab scientists could avoid a nuclear blast while getting

extremely accurate data on the early stages of a bomb's detonation, physicists say.

The tests could be used not only to study the existing U.S. arsenal but also to design new weapons, experts say.

Such tests would violate the spirit of a nuclear test ban being negotiated in Geneva because the purpose of the ban would be to halt the design of new weapons, said Christopher Paine, an arms control expert with the Natural Resources Defense Council in Washington, D.C.

Energy Department documents don't answer

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LANL Won't Say Much About Plan to Detonate Plutonium

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the question of whether mock weapon tests with plutonium are planned, and the department hasn't complied yet with a Freedom of Information Act request the Journal filed 17 months ago seeking documents that would answer the question.

Asked directly whether such tests are planned, a laboratory spokesman wouldn't answer.

The reason for the secrecy is that the DOE's Office of Nonproliferation has blocked efforts to declassify information about the tests, said Bryan Siebert, head of the DOE's office of classification.

That allows the DOE to avoid having a public discussion of such questions, said Steve Aftergood, an analyst of government secrecy policies with the Federation of American Scientists, a Washington, D.C., think tank.

♦ ♦ ♦

It is no secret that Los Alamos wants to blow up some plutonium, the radioactive metal at the heart of nuclear weapons.

In documents made public over the past year, laboratory officials acknowledge plans to conduct explosive tests with plutonium to better understand how it behaves under high temperatures and pressures during the first millionth of a second of a nuclear blast.

But it's unclear whether they plan to conduct basic science experiments with it, slamming arbitrarily shaped pieces of plutonium with high explosives to see what happens, or whether they plan to assemble it into a simulated nuclear weapon.

The plutonium tests would be conducted at Los Alamos' Dual Axis Radiographic Hydrodynamic Test Facility — DARIIT.

The partially built DARIIT plays a major part in the DOE's plans to replace underground nuclear blast tests with non-nuclear experiments. Officials say the program's purpose is to maintain the safety and reliability of existing U.S. weapons.

DARIIT's construction was halted in January 1995 when anti-nuclear activists sued, but U.S. District Judge E.L. Mechem issued an order recently allowing construction to

Slight Chance of Big Mishap Worries Critics

BY JOHN FLECK
Journal Staff Writer

The chances of a plutonium-scattering accident from explosive tests at Los Alamos National Laboratory are small, but the risks, if one happens, are large, supporters and critics of DARIIT agree.

"An accident is very unlikely, but an accident would be very, very bad," said Santa Fe activist Greg Mello, a member of the Los Alamos Study Group and one of DARIIT's most vocal critics.

The DOE contends, in a detailed environmental study on the explosive tests, that the chances of a plutonium-releasing accident are extremely small — once every thousand to million years of normal operations.

Plutonium experiments, in which the dangerous metal would be detonated with high explosives to study it, would be conducted within double-walled steel containment vessels, according to plans being formulated by Los Alamos National Laboratory and

the Department of Energy.

The chances of one of those containment vessels being breached is a once-in-a-million years possibility, according to the DOE's analysis.

A more serious accident, in which a plutonium test device accidentally went off before it was placed inside its containment vessel, is likely to happen somewhere between once in a thousand years and once in a million years, according to the DOE study.

Critics disagree with those estimates.

"I believe that these accidents are unlikely, but not that unlikely," Mello said.

But both sides agree that an accident, if it happened, would be serious.

The most serious accident, with a plutonium device going off outside its containment vessel, would cause an estimated 5 to 12 cancer deaths in the downwind population, a calculation based on a computer simulation of such variables as wind speed and direction, according to the DOE's study.

same nuclear chain reaction as assembled into a mock weapon.

Siebert said that Los Alamos is not to blame for the secrecy. "I don't think it's Los Alamos' fault. They're just following the rules," he said.

The plutonium being produced in South Carolina, plutonium-242, has the same physical and chemical properties as weapons-grade plutonium. But it takes 10 times as much plutonium-242 to start a nuclear chain reaction, according to physicist Tom Cochran, a nuclear weapons expert at the Natural Resources Defense Council.

That means a mock nuclear weapon made of plutonium-242 instead of weapons-grade plutonium would behave like the real thing up to the time the bomb's nuclear chain reaction begins.

"You could exactly duplicate the weapon essentially in all respects," Cochran said.

Pictures taken during that time would thus give scientists an accurate picture of the weapons' behavior.

DOE and laboratory officials won't comment on whether they plan to do tests with plutonium-242, or whether the plutonium will be

While not commenting directly on the plutonium tests, Siebert said there is a conflict within the DOE regarding whether information about "the material being used in DARIIT can be declassified."

Officials in the nuclear weapons program and Siebert's office support declassifying it, while nonproliferation program officials are opposed.

Classification rules, Siebert acknowledged, have left "a roadblock" in the way of a public discussion of the question.

"I can't confirm or deny what's going to be used in the DARIIT project nor whether or not Savannah River's involved in a project to support the DARIIT facility, and that's because the material involved is still classified," Siebert said.

Details about the plutonium tests were included in a classified appendix to the DOE's environmental study on DARIIT. Mechem, in his recent ruling, said that environmental laws didn't require the information be revealed to the public.

A multi-volume DOE environmental study of the U.S. nuclear weapons complex released in February also segregates all informa-

tion about "the purpose of and need for the plutonium-242" in a classified appendix.

According to Princeton University physicist Frank von Hippel, there is no other obvious use for plutonium-242 except conducting tests of full-scale weapon configurations without inducing a nuclear blast.

The secrecy surrounding plutonium-242 puzzles von Hippel, a prominent member of the arms control community, because the plutonium's usefulness as a surrogate weapons material is common knowledge among nuclear scientists.

"They've been very reticent about talking about (plutonium-)242 although everybody seems to know about it," he said. "I don't know what's so secret about that. You'd have to be brain dead" not to figure out plutonium-242's usefulness for weapons simulations.

The real issue, said Paine, is the role plutonium-242 tests might play in skirting the intent of the Comprehensive Test Ban Treaty.

Public acknowledgement of the tests would make the United States look bad while it is arguing in favor of a total ban on even modest tests with nuclear yields, Paine said.

Water levels falling in Los Alamos

5/28/98

By KATHLEENE PARKER
The New Mexican

LOS ALAMOS — An almost forgotten footnote in reports about tritium contamination found in Los Alamos' groundwater in recent years is a mention that water levels are falling in many of the city's wells.

While some officials seem reluctant to use the term, they admit that Los Alamos is "mining" groundwater — drawing water from the aquifer faster than the aquifer is refilling, a practice some people compare with living off the principal in a savings account.

The falling water levels are not cause for concern, said Bruce Gallaher, a hydrologist at Los Alamos National Laboratory.

"Yes, there have been water level decreases that are great in some areas," he said. "But in the future I think they will continue to be able to keep the drawdowns to no greater than we see now."

But some environmentalists and others say Los Alamos should remember it is in an arid state.

"They are using water like there is no end to it," said Janet Gerwin of Los Alamos. She heads the Water Resource Committee for the Pajarito Chapter of the Sierra Club.

"This could mean the water supply in this area cannot support as high a population as perhaps the city fathers want it to support and possibly we ought to study some (water) conservation measures," Gerwin said.

WATER

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One concern is that a depletion of the Los Alamos aquifer could hurt wells in surrounding areas, said Wilfred Gutierrez, chairman of the New Mexico Acequia Association.

"When it comes to water, we are intertwined," he said, "and when you drill a well, it may hurt another — it may hurt others downstream."

The drawdowns, in wells scattered across the Pajarito Plateau, vary according to well location, Gallaher said.

Near Otowi Bridge, at the bottom of the hill leading into Los Alamos, levels dropped from 40 to 140 feet in a well field dating from Los Alamos' early years, Gallaher said. But those wells are no longer used and levels are rising, although the wells are contaminated with arsenic probably pulled into the aquifer by pumping, he said.

In Guaje Canyon, in north Los Alamos, wells are variable with levels stable or dropping up to 120 feet, while the more centrally located Pajarito and Otowi well fields have seen drops of only 20 to 40 feet.

The size of the aquifer is unknown.

But the drawdowns do not forecast a water supply problem for the town of about 18,000 that draws all of its municipal water from wells, Gallaher said.

The wells are owned by the Department of Energy but will soon be transferred to Los Alamos County, another closure on Los Alamos' history of being a government-owned and operated town.

Gallaher said Los Alamos' water situation is not similar to that confronting Albuquerque, which discovered its aquifer to be much smaller than believed, or Tucson, Ariz., which pumped

groundwater to the extent that the ground subsided.

On the contrary, new wells in the Pajarito and Otowi well fields show strong flows and adequate water for all of the town's long-term water needs, he said.

But Gerwin bases her concerns on a LANL report issued in 1996 through the New Mexico Geological Society.

That report, *Recharge to the Pajarito Plateau Regional Aquifer System*, authored by a private consultant and three LANL scientists, including Gallaher, discusses the possibility that there is comparatively little water recharge into the aquifer from which Los Alamos and the nearby bedroom community of White Rock draw water.

In fact, the report may best illustrate how little is known about the aquifer that supplies Los Alamos water.

Hydrologists believe, but are not sure, that water under the east part of the Pajarito Plateau is part of the Tesuque aquifer, draining off the slopes of the Sangre de Cristo Mountains, with the west boundary somewhere just west of the Rio Grande, near White Rock.

The water in this area is 30,000 years old.

But water under Los Alamos is much younger, sometimes as young as 1,000 years, perhaps indicating a different aquifer — or merely indicating that younger water enters the aquifer from the west and flows slowly toward the Rio Grande.

And it is the age of the water that gives clues that little surface water may be finding its way into the aquifer.

Naturally occurring tritium decays relatively quickly, hence water with extremely low natural tritium levels is likely to be old. If newer water mixes in, tri-

tium levels rise, but with the exception of tritium contamination from Los Alamos National Laboratory, little tritium is found in much of the aquifer, indicating that most of the aquifer is made up of old water and little new surface water.

In fact, the report hypothesizes that the net aquifer recharge "would appear to be much smaller than the pumping rate for the municipal water supply" and that "recent recharge is not volumetrically significant."

Los Alamos may be drawing water from a largely "closed" aquifer that cannot recharge itself, said Gerwin.

But not everyone agrees.

Greg Mello, of the Los Alamos Study Group, said the fact that

surface tritium contamination has, within the span of three or four decades, found its way into the city water supply, indicates significant recharge. Mello, an outspoken LANL critic, fears LANL is trying to downplay the potential for tritium contamination from the lab to spread throughout the aquifer.

But recharge rates in any aquifer are extremely difficult to determine, said Michael Dale of the DOE Oversight Office of the New Mexico Environment Department. One thing that may come of a plan to drill 32 additional test wells to learn more about tritium contamination on the Pajarito Plateau may be a greater understanding of the recharge rate, he said.

Secret Mesa: Inside Los Alamos National Laboratory

Bryan Taylor.

Bulletin of the Atomic Scientists v54.n3 (May-June 1998): pp65(3).

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By Jo Ann Shroyer John Wiley & Sons, 1998 230 pages; \$24.95

Los Alamos's importance to nuclear culture is grounded in its dual existence. On one level, it is a real organization where billions of federal dollars have flowed to elite scientists and engineers for the complex and risky task of designing nuclear warheads. At the same time, Los Alamos is a compelling symbol. In its symbolic life, its very existence, "and the fearsome creativity that reside[s] within," have been important for deterrence, says author Jo Ann Shroyer, an award-winning print and radio journalist.

Beyond having served as a message to the Soviets, Los Alamos is also a symbol of one of the most controversial events in U.S. cultural history. That event has been interpreted in different ways to advance the interests of various pro-and anti-nuclear groups. In the official version--held precious by political and social conservatives--Los Alamos is the honored site where scientists produced a necessary, war-winning weapon that--on balance--saved lives.

In this official view, it was correct to institutionalize Los Alamos after the war to produce the weapons that inhibited (and ultimately bankrupted) evil Soviet expansionism. Despite victory in the Cold War, the labor of Los Alamos professionals is still required to deter evolving threats, such as ballistic missile technology in the hands of rogue states."

In the unofficial narratives of anti nuclear activists and other leftists, Los Alamos represents, at best, a moral ambiguity. The atomic bomb was not essential to achieving victory over Japan, and dropping it on largely civilian populations was a vengeful, barbarous act fueled by a desire to deter Stalin; institutionalizing the destruction of the world as a solution to political disputes was irrational and immoral; the arms race caused grievous harm to the global economy, the environment, and the human psyche; and finally, the end of the Cold War provides the opportunity to abolish nuclear weapons, which Los Alamos will ultimately resist.

All of these cultural histories are familiar to Bulletin readers, but the point is how Los Alamos serves in these stories as what scholars call an "origin myth" or a "significant symbol."

This symbolic perspective is useful for understanding how Shroyer's book fits into the evolving dialogue over Los Alamos' history and future. In the wake of the Cold War, that dialogue has been increasingly conducted in both policy and cultural forums. Journalists of all stripes have descended on the town to profile (and sensationalize) its "secret" history and uncertain future. Artists have produced works and performances that challenge the lab's legitimacy. And historians and other scholars await further opening of its archives.

Shroyer's journalistic type of storytelling offers particular benefits and drawbacks for readers. Overall, Shroyer provides a broad and detailed portrait of a quintessentially nuclear institution.

Complex information about nuclear technologies--such as those involved in testing and waste disposal--is made comprehensible to a lay audience.

Shroyer focuses selectively on the traumatic shifts and tensions that have affected the Los Alamos community. At one level, it has been an organizational drama. Just as the Cold War ended and Los Alamos was forced to find new missions and funding, revelations about environmental scandals in the nuclear weapons complex forced new regulatory constraints at exactly the moment the laboratory needed to be flexible and innovative. Increased competition for scarce research funding--and oppressive micromanagement--grate against the lab's culture of entitlement and collaboration.

At the same time, the traumatic introduction of "quality" and "team" paradigms combined with layoffs and the negative publicity surrounding the 1993 revelations about secret human experiments conducted early in the Cold War, have left many Los Alamos employees reeling with shock. Time will tell if the institution's new and controversial missions (environmental restoration; stockpile stewardship; prevention of nuclear theft, terrorism, and proliferation; technology transfer; and basic research) will be adequate to insure its survival.

At the same time, Shroyer's tale has a familiar psychological dimension. Her portraits of laboratory professionals depict these figures as patriotic, brilliant, and driven. Many are vividly human--informal, eccentric,, devoted to family--with a "weary sorrow" over ethical struggles concerning the actual and potential consequences of their work. They are not caricatures.

Foes of Los Alamos will be equally drawn to Shroyer's depictions of insularity, elitism, presumptuousness, emotional restraint (if not dysfunction), as well as the image of tortured nobility that some elements of this predominantly white, hyper-rational, and high-technology culture promote.

Perhaps most poignantly expressed is the fact that many Los Alamos professionals believe that in the absence of explicit and widespread dissent from their views, Americans during the Cold War gave them an unambiguous and universal mandate. Or, as one physicist said, 'We did what we did because the people wanted it--a claim partially contradicted on the very next page by the lab's director, who argues that the Cold War gave Los Alamos a cover story: "We were able to do science without necessarily having to get full public consensus for what we were doing." Indeed.

Many of these lab figures seem genuinely hurt to discover that the citizens touring their city and officials looking over their shoulders are not particularly grateful to have had the nuclear sword of Damocles suspended over their heads for 50 years.

Secret Mesa should give both sides of the nuclear divide reason to pause and rethink their rhetoric. Anti-nuclear Americans might ask themselves what could reasonably be expected to happen when a society implicitly chooses to delegate--rather than share--responsibility for as terrifying a power as the Bomb. It should come as no surprise that the small and isolated groups to which authority was delegated would develop powerful and rigid ideologies to cope with such an awesome responsibility.

Members of the Los Alamos community, on the other hand, might pause to consider what could reasonably be expected from Americans raised in a culture of muted nuclear terror, in which opposition to the Bomb was characterized as naive, unpatriotic, and extreme. In this intransigent defense theology, Man is fallen; peace is impossible; protest is foolish.

The disadvantages of Shroyer's journalistic approach can be clarified by comparing it to Nuclear Rites, anthropologist Hugh Gusterson's study of Los Alamos's sister laboratory in Livermore, California (reviewed in the July/August 1997 Bulletin). In that study, Gusterson courageously--or foolishly--throws himself into the nuclear breach by deconstructing the "tribal" beliefs of both weapons designers and protesters.

Shroyer takes a more traditional journalistic approach, acting as an uncritical conduit for the nuclear "facts." As a result, the politics of this volume emerge through the inclusion and exclusion of voices, and in the ways that arguments are subtly endorsed or opposed. Shroyer is no doormat for nuclearism, but readers may sense missed opportunities for more complex treatments of controversial issues.

The community's caricature of protesters goes largely unchallenged, for example, and Shroyer chooses not to interview members of the Los Alamos Study Group, a small but determined group of regional activists whose opposition to lab policy is often well-informed. (See, for example, Greg Mello's "New Bomb, No Mission" in the May/June 1997 Bulletin.) Also, the news that Los Alamos has accepted the task of manufacturing new plutonium "pits" (fissile cores) passes without noting that to survive, the institution is willing to assume "dirty" production work that violates its promises to its community. And missing are the voices of the nearby Pueblos, who are seeking to reclaim tribal lands appropriated by the Manhattan Project, some of which are now contaminated.

These voices would have usefully expanded Shroyer's portrait of Los Alamos and balanced the overreported interviews that awkwardly frame some of her chapters. Nevertheless, Shroyer describes the extreme suspicion and resentment that Los Alamos natives hold toward mainstream media accounts of their history and lifestyle-attitudes that are a powerful challenge to anyone who wants to write about the lab. They exert a kind of moral gravity on Los Alamos tales, driving them toward either simplistic endorsement or vilification.

Shroyer has not succumbed to these forces, but she has not fully escaped them either. In a memorable image, she describes a special drawer at the Los Alamos Historical Society that contains a collection of the most outlandish and biased media accounts of the community. This book will not wind up there.

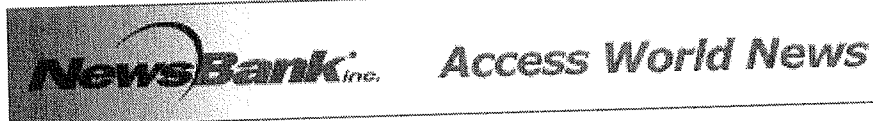
Bryan Taylor is an associate professor of communication at the University of Colorado-Boulder. He is writing a book about cultural images of nuclear history.

Named Works: Secret Mesa: Inside Los Alamos National Laboratory (Book) Book reviews

Source Citation: Taylor, Bryan. "Secret Mesa: Inside Los Alamos National

Laboratory." *Bulletin of the Atomic Scientists* 54.n3 (May-June 1998): 65(3). *Expanded Academic ASAP*. Thomson Gale. New Mexico State Library. 14 Nov. 2006

Thomson Gale Document Number:A20579831



Paper: Santa Fe New Mexican, The (NM)
Title: Insiders: Richardson won't make waves
Date: June 18, 1998

Because of his political ambitions in particular the possibility that he may one day run for governor or the vice presidency Bill Richardson is unlikely to derail or scale back Department of Energy nuclear weapons programs in New Mexico, according to observers.

The reason is simply that the DOE's presence in the state is huge and that too many jobs would be lost were Richardson to try and curb, for example, the agency's ambitious and enormously expensive "stockpile stewardship" program a program critical to the future of Los Alamos National Laboratory.

"We're worried that he might be enticed to support pork-barrel projects" at places like Los Alamos National Laboratory, Todd Macon of the **Los Alamos Study group** a Santa Fe organization said last month when news of Richardson's possible appointment to the Energy post first leaked out.

Stewardship is a 10-year, \$45 billion effort to maintain U.S. nuclear weapons in the absence of underground testing. Because New Mexico is home to two of the country's three nuclear weapons labs Los Alamos and Sandia the program translates into \$1.8 billion in spending in the coming year alone.

Nor is Richardson likely to come out against the Waste Isolation Pilot Plant, the controversial underground nuclear waste repository near Carlsbad. The project has the full support of the Clinton administration, and almost no one expects Richardson to try and turn the tide on a project that the government has already invested billions in and which means hundreds of jobs for the next 20 to 30 years in the Carlsbad region.

Longtime WIPP critic Don Hancock expressed the hope Wednesday that Richardson would, in coming days at least, take a strong stand against the Energy Department's position that it intends to ship nuclear waste to WIPP before receiving a permit from the State Environment Department.

"I would like Richardson to do what DOE (until recently) said it would do, which is not open WIPP until they have met all the legal and regulatory requirements," Hancock said.

The lack of a state permit is at the heart of a recent lawsuit against WIPP filed by New Mexico Attorney General Tom Udall, Concerned Citizens for Nuclear Safety a Santa Fe group and the Southwest Research and Information Center, an Albuquerque organization.

Additionally, the DOE is embroiled in a dispute with the environment department, which says the agency has failed to prove that the waste it wants to ship does not contain toxic chemicals, solvents and metals that are under the regulatory control of the state.

The Energy Department believes it has already made its case and is engaged in a high-stakes effort to persuade the state that the waste it wants to ship all of which would come from Los Alamos is tainted only with radioactive contaminants.

Richardson spokesman Stu Nagurka said Wednesday he had no comment about Richardson's position on the dispute or on anything related to Richardson's nomination to the Energy Department post.

All information "is coming out of the White House," Nagurka said from his New York home.

As a congressman from Northern New Mexico, Richardson repeatedly took stands against the way DOE handled the WIPP project.

In 1991, he supported a lawsuit against WIPP mounted by citizens groups. Richardson's concern, as he stated in a formal legal declaration, was that DOE was attempting to open WIPP without congressional approval.

In 1992, he said the following on the floor of the House:

"The people of New Mexico should not be subjected to unnecessary health and safety risks by permitting the emplacement of radioactive waste inside WIPP before it has been proven safe, because of political pressure from Congress."

And in 1996, Richardson tried to amend a bill that sought to set a WIPP opening date for last November. He

sought to require that the DOE demonstrate and the Environmental Protection Agency certify that hazardous wastes mixed with nuclear wastes would not seep into groundwater aquifers above the salt bed.

As for Los Alamos, while activists fear Richardson will support full funding of the lab's nuclear weapons programs, officials at the lab itself are reportedly pleased that the former New Mexico congressman will take over the helm of the Energy Department.

A source at the lab said ``people would be pretty happy up here" if Richardson's appointment is confirmed by the Senate, as expected.

``They know him up here and people in general think he's a reasonable, fair guy," the source said.

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Author: KEITH EASTHOUSE
Section: Main
Page: A-1
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Nuclear Program Truthfulness Challenged

Court Order Sought For New Studies

Journal Staff Report

In a Washington, D.C. courtroom Monday, lawyers for nuclear disarmament activists and the U.S. Department of Energy will do rhetorical battle over this question: Is the government being truthful about its U.S. nuclear-weapons program?

By the lights of the activists, the answer is flatly no.

Activists with 39 environmental and disarmament groups are trying to persuade U.S. District Judge Stanley Sporkin to order new environmental studies of the DOE's core nuclear-weapons program.

And one scrap of evidence they will argue to Sporkin has to do with catastrophic accidents at Los Alamos National Laboratory.

Take this scenario: A "worst-case" earthquake collapses Los Alamos' plutonium processing facility, sparking fires and releasing plutonium. The fortress-like, top-security lab makes, among other things, plutonium 238-powered batteries for NASA spacecraft and nuclear weapons, and it is gearing up to handle more weapons-grade plutonium in manufacturing pits, the plutonium triggers for thermonuclear weapons.

The odds of this earthquake-fire accident, the DOE says, are exceedingly thin: one in a million or less. Activists think the DOE is lowballing the odds, but they have an even bigger problem with the acci-

dent itself.

Here's one rub: The total release of plutonium, according to a 1996 DOE environmental-impact study for pit production, is less than two-thirds of a gram — roughly the mass of a raisin.

It seems that's not true after all. Prompted by the activists' lawsuit, a top DOE weapons official in the Albuquerque Operations Office conceded the two-thirds gram of plutonium is not, in fact, a total plutonium release but merely the "respirable" release.

Translation: The DOE only calculated the minuscule fraction of the earthquake-released plutonium that would be in particles tiny enough to be inhaled by the public.

The actual plutonium release would be a thousand times higher, and the DOE's environmental-

"What they (the DOE) wrote is false. Now they're saying they knew it was false. I'm not saying why they put it in there, but it's pretty misleading."

LOS ALAMOS STUDY GROUP'S GREG MELLO
ON AN ENVIRONMENTAL-IMPACT STUDY OF PLUTONIUM
RELEASE AFTER A "WORST-CASE" EARTHQUAKE-FIRE SCENARIO

impact statement doesn't estimate the impact on the environment, ground-water supplies, property values, endangered species or future cleanup costs.

"What they wrote is false. Now they're saying they knew it was false," said Greg Mello, head of the Los Alamos Study Group in Santa Fe, a lab watchdog organization keenly interested in plans for pit production at LANL.

"I'm not saying why they put it in

there, but it's pretty misleading," Mello said.

Activists such as Mello are paying close attention to earthquake scenarios at Los Alamos because lab geologists recently found evidence that an old fault line may run under or close to the Chemistry and Metallurgical Research Building, a 1950s structure that predates modern seismic standards and that is used for chemical analyses of plutonium and other radioactive materi-

als.

In 40 years of pit production at DOE's now-defunct Rocky Flats plant near Denver, there were no earthquakes. But there were two major fires that resulted in releases of more than a ton of weapons plutonium.

The DOE calculates risks at Los Alamos only for "localized" fires, contained inside firewalls. But activists say the history of Rocky Flats, plus an earthquake scenario in which the walls collapse, suggest the DOE really should be evaluating risks from a fire in the entire building, spreading to areas where lab workers handle the more radiologically dangerous plutonium 238.

"Sooner or later, 'responsible' public officials have to be responsible for what they're putting out to the public," Mello said.

Anti-WIPP fight losing its punch, some say

By KEITH EASTHOUSE
The New Mexican 6.21.98

Ten years ago, the Department of Energy was on the brink of sending trucks loaded with nuclear waste down St. Francis Drive on their way to the Waste Isolation Pilot Plant.

The city of Santa Fe was up in arms.

Today, the Department of Energy is on the brink of sending trucks loaded with nuclear waste down the Santa Fe Bypass on their way to WIPP, the underground nuclear waste repository near Carlsbad.

Does anyone care?

"You know, years ago when I would go up to Santa Fe, everybody had anti-WIPP signs in their window. And the last time I was in Santa Fe, I couldn't find one," former Carlsbad Mayor Bob Forrest said recently.

Forrest is hardly an unbiased observer. Carlsbad has long been a center of pro-WIPP sentiment because the project means hundreds of jobs for that hard-pressed area for the next 20 to 30 years.

Nonetheless, it seems undeniable that Santa Fe — long known as ground zero for the anti-nuclear movement in New Mexico — is far less alarmed about WIPP than it was in the late 1980s and early 1990s.

"I don't see any bumper stickers like I used to. I think the general majority is tired of

hearing about it," commented Dan Gibson, who played a leading role in opposing WIPP during the height of opposition to the project.

Another possibility is that Santa Feans have become convinced by the Energy Department's claim that leaving the plutonium-contaminated waste where it is — at places like Los Alamos National Laboratory — poses a greater public health threat than sending the waste to WIPP, located 2,150 feet under the New Mexico desert in an ancient salt bed formation.



Bob Forrest

Recent poll results by The University of New Mexico Institute for Public Policy — based on a random sampling of 1,249 households — indicate a small shift in public attitudes in favor of WIPP.

According to Kerry Herron, 49.2 percent of the New Mexico residents asked this spring favor opening WIPP, compared with 45.7 percent who are against opening WIPP. In the fall of 1997, 45.1 percent supported opening WIPP while 50.3 percent said they didn't want to see WIPP open.

No doubt this latest poll — not yet published by UNM — will give comfort to the Energy Department. But the shift in attitudes is not dramatic, and the results don't change the fact that the New Mexico public is divided about the project.

Few divisions were apparent in Santa Fe eight to 10 years ago, when it seemed the entire community rose as one against the project.

Local businesses, alarmed at the negative impact WIPP trucks might have on their pocket-books, banded together and formed an organization called Businesses Against WIPP.

A group of remarkably energetic activists emerged, founded Concerned Citizens for Nuclear Safety and succeeded in raising public awareness about the underground nuclear waste repository near Carlsbad to unprecedented levels.

A public hearing at Sweeney Convention Center in 1991 attracted so many people — well more than 1,000 — that police closed off streets. CBS *Evening News* showed up and broadcast a story. The message was clear: People didn't want WIPP.

"There was a sense in the air that 'Hey, we can stop this. We're going to raise some hell,'" Gibson recalled. "And we did raise hell. We worked night and day."

The massive opposition to WIPP — and the outrage expressed during public testimony — made Santa Fe about the last place in the world Energy Department officials wanted to go.

"The DOE used to hate coming up here," Gibson said. "We heard one guy say once that he'd rather get a root canal than go through a hearing in Santa Fe."

A contrast to the 1991 hearing was a recent DOE hearing — also at Sweeney — about LANL's new mission as the center of plutonium-trigger manufacturing for the nation's nuclear weapons complex.

Such a hearing 10 years ago would probably have attracted a crowd similar in size to the one that descended on Sweeney for that memorable WIPP hearing. In today's less politically explosive atmosphere, the hearing was marked mostly by empty seats.

"People have lost faith that these hearings work," Jay Coghlan of CCNS said on the day of the hearing.

Longtime WIPP critic Don Hancock concurred with that, but said the lack of interest in participating in public hearings does not translate into a lack of opposition to WIPP.

"Why do hundreds of people not turn out at DOE and EPA meetings? Because people know it's a

FIGHT

Continued from previous page

waste of time. That doesn't mean people don't care," Hancock said.

"I see more people being more cynical about either the DOE or the EPA doing anything right to protect the health and safety of people in New Mexico when it comes to WIPP," added Hancock of the Southwest Research and Information Center, an Albuquerque citizens' group.

Hancock said telephone calls from people opposing WIPP — and financial contributions to his organization to support its opposition to WIPP — have not dropped off compared with previous times when DOE has been on the brink of shipping waste to WIPP.

Hancock also pointed out that people still occasionally turn out in large numbers for WIPP-related public hearings. He cited a recent Santa Fe City Council meeting about the WIPP bypass, which attracted a large crowd and lasted until 2 a.m.

Nonetheless, Hancock did not dispute that WIPP public hearings are not drawing the masses of people that they did in the past. But he said that is because it has become clear that participating in such meetings often has a minor impact, or perhaps no impact at all.

Hancock said that back in the 1980s "we were telling people that their attendance and participation at public hearings makes a difference."

"We're not telling people that anymore," Hancock said.

Santa Fe community organizer Peggy Prince said with regard to the recent hearing on LANL that a big turnout would have merely afforded DOE the opportunity to claim that the public is involved in the decision-making process when in fact the opposite is true.

"A lot of people feel that the process is disingenuous and that the DOE was wanting a big turnout so it would look like the public has access to the process, when in fact decisions have already been made.

"People feel disenfranchised. People are saying it's time to change strategy," Prince added.

She wouldn't elaborate. But it would seem that obvious alternatives to participating in public hearings are more "direct action" interventions — for example, environmentalists sometimes stop logging operations by chaining themselves to logging equip-

ment.

Greg Mello of the Los Alamos Study Group, a Santa Fe organization that focuses on LANL weapons issues, said activists are not doing enough to inform and motivate the public about things nuclear.

"We've been trying to block the worst excesses of the nuclear industry in Congress and the courts, and we have not been doing our organizing homework enough," Mello said.

This failing — if it is a failing — is puzzling considering that "people power" is generally the strongest weapons available to any activist organization.

Massive public outrage against WIPP or some other nuclear weapons project "is what we fear most," one DOE official said recently on the condition that he not be identified.

But motivating the public is not easy work — particularly when what's needed is sustained opposition to a project, not merely a one-time burst of outrage.

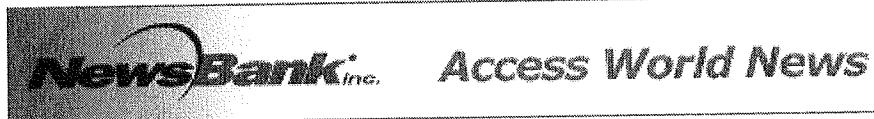
"I don't know how many hearings we geared up for and made hundreds of phone calls for," Gibson recalled. "What happened is that people poured their heart and soul into (fighting WIPP) and eventually got burned out."

While it's not so surprising that the people who led the battle in Santa Fe against WIPP 10 years ago have moved onto other things, it's a little less clear why a new crop of anti-WIPP activists hasn't emerged.

"Maybe Generation X is not as politically active," speculated Gibson, who is in his 40s. "We came of age on the fringe of the Vietnam protest, and we saw what mass action could do. Maybe the next generation doesn't have that model. Maybe they feel more hopeless about affecting the process."

Gibson cited another possibility: that 10 years ago, the WIPP project was more glaringly inadequate than it is today. Ten years ago, for example, the Energy Department was seeking to open WIPP without congressional approval and without having an independent regulator of the project.

"Maybe there's also a feeling that people have done everything they can do about WIPP," Gibson said. "I think we fought the good fight. I think the options are being narrowed all the time. They've about exhausted the possibilities."



Paper: Albuquerque Tribune, The (NM)
Title: IN BRIEF
Date: June 26, 1998

DOE gives green light to nuclear simulator

The Department of Energy has approved construction of a \$48.9 million nuclear-weapons simulation machine, called Atlas, proposed at Los Alamos National Laboratory.

The lab announced today that the construction contract was awarded this week to the Henderson Co. of Albuquerque and that work is expected to begin at the end of July.

While the project is deemed essential by Los Alamos and DOE to maintain the nation's nuclear-weapons stockpile without actually testing more bombs, the announcement immediately drew criticism from an anti-nuclear organization.

Greg Mello, an analyst for the **Los Alamos Study Group** in Santa Fe, said Atlas is an example of why the expensive stockpile program is "gold-plated" and fraught with pitfalls.

The group, a lab watchdog, insists that Atlas "is not needed and is a distraction" from the simple monitoring and remanufacturing program that it says would more directly ensure the nation's warheads remain safe.

Atlas would use powerful magnetic fields to simulate the extreme pressures inside nuclear weapons.

Staff and wire reports

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Author: Staff and wire reports
Section: Local News
Page: A2
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LANL to build machine to study explosions

By KEITH EASTHOUSE

The New Mexican

6. 27. 98

Los Alamos National Laboratory has been given the go-ahead to build yet another machine to help lab scientists monitor the condition of the nation's nuclear arsenal.

The pulsed-power machine called Atlas should begin operations by fall 2000, said Mark Parsons, leader for the \$43 million Atlas technical project. The machine will be housed in a 35,000-square-foot building at the lab.

The machine will provide information on the second stage of a nuclear explosion. It will complement the laboratory's partially

The pulsed-power machine called Atlas should begin operations by fall 2000.

built \$260 million Dual Axis Radiographic Hydrotest Facility, which will provide data on the first stage of a nuclear blast.

The Energy Department gave formal approval to build the facility even though there is considerable uncertainty about whether machines like Atlas are really needed for the nation to be able to maintain its nuclear arsenal under the DOE's elaborate stockpile stewardship program.

"This device lacks a *raison d'être* other than that it was deemed necessary to make sure Los Alamos didn't fall behind

Livermore" in the number of stewardship facilities it has, lab critic Greg Mello said.

Los Alamos' sister lab, Lawrence Livermore National Laboratory in California, already has a machine that studies the first stage of nuclear explosions, the FXR device. Livermore also is the site for the \$1.2 billion National Ignition Facility, a giant laser that is supposed to provide data on the second stage of a nuclear detonation.

Atlas will use powerful magnetic fields to simulate extreme pressures inside nuclear

weapons, which will allow researchers to study the effects of aging on weapons and the physics of what goes on inside them.

Lab critics charge that data from stewardship machines can be used to design new types of nuclear weapons.

The machine also will be used for basic research, materials science, ultra-high magnetic field experiments, plasma physics and geophysics.

The project was proposed in 1994 and has been funded for design efforts since 1996. The Department of Energy recently authorized the lab to begin construction.

The Associated Press contributed to this report.

Study Group will continue to leaflet Bradbury museum

7.22.98
By CAROLINE SPAETH
Monitor Managing Editor

Leafleting at the Bradbury Science Museum will go on.

And nine people arrested for handing out leaflets at the museum in the past will receive \$55,000 in a settlement of a lawsuit they brought against Los Alamos National Laboratory in January.

Lab officials said the settlement, reached Tuesday out of court, implied no wrongdoing on the part of the lab, but they acknowledged they could have worked harder on a compromise with the Los Alamos Study Group before the arrests.

Two members of the Study Group, a Santa Fe-based anti-nuclear organization, were arrested in April 1997 for handing out disarmament-related leaflets. Seven more Study Group members, handing out copies of the Bill of Rights, were arrested in June 1997.

Claiming a victory for free speech, Greg Mello of the Study Group said the settlement showed the lab was in the wrong.

"The lab was knowingly violating our First Amendment rights," said Mello, who was one of the two people arrested in April. The two spent three hours in jail before they each posted a \$300 bond.

In their lawsuit, the Study Group members asserted the museum was public property, and, therefore, they could hand out pamphlets freely.

"They're American citizens, and they're in a free country. Public officials can't arrest you for handing out leaflets on a public property," said John Boyd, attorney for the Study Group.

The lab held that the museum was private property, and that leafleting, regardless of the subject matter, could

disrupt the museum's activities.

"It had nothing to do with the content (of the leaflets). Leafleting could disrupt activities at the museum and lead to problems, such as people arguing," said James Rickman, lab spokesman.

Settling the lawsuit out of court didn't implicate the lab, he said, but only acknowledged that the lab could have reached a compromise with the Study Group.

"The settlement does not admit any wrongdoing on the part of the laboratory," Rickman said. "We probably could have worked harder to reach a compromise with the Study Group."

Study Group members approached the lab before leafleting, asking if they could distribute the leaflets.

The lab said they needed permission first and would be arrested if they did otherwise. Lab policy allows demonstrations on lab property but only if a permit is secured first. The lab then refused to give the Study Group permission to leaflet at the museum.

Representatives of the two sides met twice before the Study Group members went to the museum and were subsequently arrested.

The Study Group will use the money to pay for legal fees incurred in the lawsuit and for staff time, said Mello.

With the lawsuit settled, Mello said the Study Group will continue to hand out leaflets at the museum at least once at week. The group will also turn its attention to trying to secure wall space at the museum for a permanent anti-nuclear display.

The museum currently holds a lottery for groups wanting to use the space. The Study Group is the only anti-nuclear group that participates in that lottery.

LANL to pay \$55,000 to settle

7.22.98

By KEITH EASTHOUSE
The New Mexican

Los Alamos National Laboratory has agreed to pay a total of \$55,000 to nine anti-nuclear activists who were arrested last year after distributing leaflets critical of the laboratory outside the Bradbury Museum.

The settlement agreement includes a payment of \$35,000 to the activists, affiliated with the Santa Fe-based Los Alamos Study Group, a citizens organization.

The lab also agreed to pay \$20,000 to cover the group's legal fees.

The study group filed a lawsuit in U.S. District Court in January that claimed

lab and museum officials violated the activists' First Amendment rights by arresting them on two occasions — in April 1997 for handing out pamphlets advocating nuclear disarmament, and in June 1997 for distributing copies of the Bill of Rights.

The arrests were ordered by John Rhoades, director of the museum, which has exhibits on the development of nuclear weapons.

The charges were dropped last September, but the activists still went ahead with their lawsuit.

"This is a victory for free speech," said Greg Mello, head of the study group and one of the nine activists who were handcuffed in front of the muse-

The Los Alamos Study Group filed a lawsuit in U.S. District Court in January that claimed lab and museum officials violated the activists' First Amendment rights by arresting them on two occasions.

um last spring.

Lab spokesman James Rickman said Tuesday that "the settlement doesn't assume any wrongdoing on the part of the lab."

But he added that "we believe we probably could have handled the situa-

tion differently. We could have per-
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The study group and lab officials
cussed the issue of whether leafle
would be permitted in the weeks l
ing up to the arrests.

But despite an 11th-hour meetir

arrests suit

which lawyers for the two sides were present, the lab went ahead with the arrests.

The group's attorney, John Boyd, said: "I am always surprised to find public officials who believe they have the authority to suppress free speech on public property, such as a sidewalk in front of a museum."

Rickman said the issue from the lab's point of view "was whether leafletting would disrupt normal operation of the museum.

"We offered them another spot (several feet) to the south," Rickman said.

In the future, he said, leafletting will be permitted in front of Bradbury Museum.

LANL Pays Out \$55,000 For Arresting Protesters

BY IAN HOFFMAN
Journal Staff Writer

7.22.98

The days of Los Alamos National Laboratory arresting people for handing out protest leaflets are over.

The federal nuclear-weapons lab paid \$55,000 this week to nine arms-control activists arrested and handcuffed last spring outside LANL's Bradbury Science Museum.

"This is a victory for free speech," said arrestee Greg Mello, head of the Los Alamos Study Group, a nuclear-disarmament group in Santa Fe.

So far in 1998, arrests of New Mexico people handing out written materials on government property have cost state and federal taxpayers over \$280,000 paid to the arrestees, plus an unknown quantity of government legal fees.

"I hope these cases would be reminders: You're not supposed to arrest people for distributing literature on public property."

JOHN BOYD.

AMERICAN CIVIL LIBERTIES UNION

"I hope these cases would be reminders: You're not supposed to arrest people for distributing literature on public property," said Albuquerque lawyer John Boyd, a cooperating attorney with the American Civil Liberties Union.

This spring, the state of New Mexico paid U.S. Senate candidate Abraham Gutmann, the Green Party and their ACLU attorneys \$226,350 after losing a federal-court case over Gutmann's arrest at the New Mexico State Fair.

In settling with the nine activists, LANL did not admit wrongdoing.

"However, we do acknowledge things could have been handled better," said James Rickman, a lab spokesman. "We probably could have worked harder to come to a compromise with the study group."

Weeks before the arrests, Mello's group presented lab attorneys with Supreme Court rulings supporting the First Amendment right to issue literature in public places, including the front steps of the court itself.

Lab attorneys warned the activists they still would be arrested.

"When they couldn't answer us legally, they said it's lab policy to arrest you," Mello said.

Activists posted themselves at the museum entrance in April to give nuclear-disarmament tracts to museum patrons. They returned in June to hand out copies of the Bill of Rights.

Both times, lab officials had Los Alamos police arrest the activists for trespassing. All nine spent an hour or so in the county jail.

Lab and museum managers took the position that the activists might bother museum patrons and could incite violence among

See LANL on PAGE 3

LANL Pays Out \$55,000 For Arresting Protesters

from PAGE 1

LANL supporters in Los Alamos.

"There was a concern people might pick fights or get into yelling matches at the front door of the museum," said the lab's Rickman.

In September, District Attorney Henry Valdez refused to prosecute them. And lab attorneys eventually agreed to let the leafleters return unmolested.

Of the \$55,000 payment to the activists, about \$20,000 will pay their legal fees. They each received another \$3,500 as compensation for their arrest, jailing and the lost chance to present their views to summer tourists visiting the muse-

um.

Boyd, their attorney, praised them for risking prosecution "to make sure that all of us continue to enjoy the freedoms which we are erroneously taught we should take for granted."

"Freedom of speech is a hell of a lot more important than what goes on inside the Bradbury Science Museum, and it's a hell of a lot more important than whether or not there's a tiny increase in litter at the State Fairgrounds," he said. "It's important for citizens to be able to communicate with one another about important issues. And people shouldn't get in the way of that."

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Section--Metropolitan Edition--Final Date--07/22/1998 Page--C2

LANL Gives Up Arresting Literature Protesters

Ian Hoffman Journal Northern Bureau

Lab Pays \$55,000 This Week in Leaflet Case

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LANL did not admit wrongdoing in settling with the nine activists.

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Lab and museum managers took the position that the activists might bother museum patrons and could incite violence among LANL supporters in Los Alamos.

In September, District Attorney Henry Valdez refused to prosecute and lab attorneys eventually agreed to let the activists return unmolested.

Court allows group access to DOE records

► Federal judge gives Energy Department 20 days to provide documents

7.23.98

BY KEITH EASTHOUSE
The New Mexican

An Albuquerque federal judge has given the Department of Energy 20 days to provide a Santa Fe anti-nuclear group with a host of documents related to nuclear-weapons projects and other matters at Los Alamos National Laboratory.

U.S. Magistrate Judge Don Svet ruled the records being sought should be considered Energy Department records — subject to the Federal Freedom of Information Act.

The DOE and the laboratory had argued the records belonged to a government contractor — namely the University of Cali-

fornia — and were subject to release only under certain conditions.

The lawsuit, filed last October, was considered a test case by anti-nuclear activists regarding the long-standing position of DOE and the lab that contractor records are not subject to FOIA.

“Had DOE succeeded in its quest to exempt its nuclear-weapons labs — and with them, all its contractors — from the Freedom of Information Act, any vestige of public oversight over these facilities would have been lost,” said Greg Mello, director of the Los Alamos Study Group.

Officials from the Energy Department and the lab were not reached for comment.

The documents being sought pertain to the following:

- Laboratory nuclear-weapons projects.

- The cost and purpose of trips by lab officials to Washington, D.C., and abroad.

- Budget and staffing information related to the lab's public-relations efforts in New Mexico.

Judge Orders Lab To Open Records

BY IAN HOFFMAN
Journal Staff Writer 7-23-98

A federal judge on Wednesday shot down the U.S. Department of Energy's effort to shield its weapons laboratory at Los Alamos from federal open-records laws.

Activists and their attorney hailed the ruling as cracking the historic secrecy around the contractor-run federal laboratories responsible for the nation's nuclear arsenal.

"We have the firmest possible rebuke from a judge," said environmental lawyer Steve Sugarman. "It tells the Department of Energy that it cannot evade obligations to provide important information to the public merely by hiding that information at a contractor facility."

U.S. Magistrate Judge Don J. Svet in Albuquerque gave the Energy Department 20 days to release Los Alamos National Laboratory documents to disarmament activists of the Los Alamos Study Group in Santa Fe.

Svet ruled the documents are owned and controlled by the U.S. government, not lab contractors with the

See **FEDERAL** on **PAGE 3**

Federal Judge Orders Lab To Open Records

from **PAGE 1**

University of California, and so are subject to the federal Freedom of Information Act.

DOE attorney Jake Chavez had not read the ruling by Wednesday afternoon and declined to comment.

Svet's declaration of LANL documents as federal "agency records" could have sweeping implications. Contractors perform almost 85 percent of the Energy Department's work and have a large measure of responsibility. Every year, lab executives advise the president on whether to return to nuclear testing.

"It is not hyperbole to say the DOE's culture of secrecy poses a serious threat to democracy in this

country," said the study group's Greg Mello. "They failed this time, but they will no doubt try again."

Energy Department attorneys argued the federal courts had no power to apply open-records laws to its lab. They said Los Alamos records are exempt because they are possessed by the University of California, instead of the department itself.

Svet rejected those claims.

DOE's contract with the university identifies lab documents as property of the government, he noted.

As a result, LANL documents are federal "agency records," he found, not "contractor records" as DOE attorneys claimed.

The study group filed requests more than a year ago for unclassified descriptions of nuclear-weapons projects at LANL. Other requests were for lab plans to fix fatal design flaws in its Nuclear Materials Storage Facility, for the lab's public relations budget and for travel records on the more than 1,000 trips a year by lab officials to Washington, D.C., and foreign nations.

"Defendant (the DOE) has not shown that extraordinary circumstances exist justifying a one-year delay in the production of documents," Svet wrote.

Federal courts often have ordered the Energy Department to release records under its own regu-

lations. DOE attorneys have not appealed those rulings and so avoided the risk of turning them into appellate case law.

Svet's finding that lab documents are government records is broader still. The DOE's Chavez declined to say whether the agency will appeal.

Sugarman said he doubted the DOE would succeed in overturning Svet's ruling.

"If they had prevailed in this lawsuit, they would have been able to conduct their business behind a legal veil of secrecy ... They were trying to turn the open-government laws on their head," Sugarman said. "We hope the decision will open some eyes at the agency."

Judge rules against DOE in records case

7.24.98
By CHARMIAN SCHALLER
Monitor Editor

U.S. Magistrate Judge Donald Svet has ruled that Los Alamos National Laboratory must release to the Los Alamos Study Group a list of documents the group requested under the Freedom of Information Act.

The Department of Energy fought the request, arguing that the case should be dismissed because the records requested were not agency records within the meaning of FOIA, but were, instead, a contractor's records.

DOE made no arguments under the exceptions listed in FOIA. The agency said instead that LANL is managed by the University of California; that the records requested are not agency records; and that they are not within DOE control, and, therefore, the agency cannot be compelled to produce them.

Had the court ruled in favor of the DOE, the case could have had major implications because contractors perform almost 85 percent of DOE's work.

But in his decision, Svet said the documents *were* agency records.

He said, "The contract under which the University of California manages LANL provides that all records acquired or generated by the university in performance of the contract are property of the government and shall be delivered to the government or disposed of by the university as the government directs."

The judge also noted that the DOE "has promulgated a regulation ... which states that when it has a contract providing that any records generated are the property of the government, Defendant (DOE) shall make those records available to the public unless they are exempted from public disclosure...."

The judge granted LA Study Group's request for summary judgment, saying, "Within 20 days of the entry of this order, defendant (DOE) shall provide complete and final responses to the six FOIA requests made between April 17 and July 25, 1997, which form the basis of this action."

Greg Mello, director of the Study Group, said, "Had DOE succeeded in its quest to exempt its nuclear weapons labs — and with them, all its contractors — from the Freedom of Information Act, any vestige of public oversight over these clandestine facilities would have been lost."

And environmental lawyer Steve Sugerman, who represented the Study Group, said, "We have the firmest possible rebuke from a judge. It tells the Department of Energy that it cannot evade obligations to provide important information to the public merely by hiding that information at a contractor facility."

The Public Affairs Office at LANL declined comment, referring all questions to the DOE in Washington.

The Associated Press reported today that DOE attorney Jake Chavez "declined to say whether the lab would appeal."

But Bill Wicker, speaking at DOE headquarters in Washington, told the Monitor, "The Energy Department

has always supported responding to the Los Alamos Study Group's FOIA request. We have provided materials in response to a number of their requests and are in the process of completing the work. The only issue in the lawsuit was whether the narrow time limits established in FOIA applied to records held by DOE contractors."

In his ruling, the judge described the documents as "regarding: (1) official travel of key personnel at Los Alamos National Laboratory in 1996 and the purpose of that travel; (2) documents referred to in a DOE report on design and construction flaws in a nuclear storage facility; (3) documents regarding the LANL public and government relations program; (4) documents regarding projects overseen by the lab's nuclear weapons technology program; (5) defendant's programs for development of replacement warheads for submarine launched ballistic missiles; and (6) unclassified summaries of certain other programs."

LA Study Group NOT participating in lottery for space at Bradbury

LA Monitor 7-24-98

Editor:

A comment on the last sentence of your July 22 article "Study Group will continue to leaflet Bradbury museum."

The Los Alamos Study Group has NOT participated in the space lottery. Only the Los Alamos Education Group (a pro-nuclear group) has participated. Please see my previous (Aug. 11, 1997) letter (attached below).

Editor:

I read the letter in the Aug. 10 (1997) Monitor from Jean Nichols.

The letter seems to make the point that EVERYONE can enjoy unlimited freedom of speech. What the writer seems to overlook is that a "freedom" can be enjoyed only when it does not abridge the rights and freedom of other people. Society makes laws to define the limits of the exercise of "freedom." One of those laws limits trespass to preserve property rights. Supporters of Los Alamos Study Group (LASG) intentionally violated that law. Intentional violation of a law carries penalties.

The writer also mentions the former LASG exhibit at the Bradbury Science Museum. That exhibit was objectionable to some viewers, who also wanted to exercise THEIR freedom of speech. The Los Alamos Education Group was formed to request rebuttal space. The museum developed a policy to decide who could have exhibit and rebuttal space by a semiannual lottery. Both LASG and LAEG protested the policy.

LASG decided NOT TO ENTER the lottery in both January and July. That is their right. However, the Los Alamos Education Group submitted a lottery entry in both months. Since they were the only entry, LAEG won the right to have the exhibit space. The rebuttal space has been unused.

LASG has been trying to establish linkage between their leafletting the public on museum property and not being able to exhibit in the museum. In fact, supporters of LASG believe themselves to BE "the public" and demand extra privileges because of that belief. I urge lab management to hold fast in following their policy on exhibits and in prosecuting LASG's trespass.

M. G. Lockhart
91 Mimbres Drive
Los Alamos



Edition--Final Date--08/04/1998 Page--A1

Sandia Tests Nuclear Fear Factor

John Fleck Journal Staff Writer

UNM Study: Americans Wary of China Stockpile

China has replaced the Soviet Union as the bogeyman of our nuclear nightmares, according to a nationwide University of New Mexico public opinion survey released Monday.

We are also more afraid in this post-Cold War world of nuclear proliferation and the enemies we don't know, than the old, familiar rivalry with the Soviet Union, said Hank Jenkins-Smith, one of the UNM researchers who led the survey.

And while many people believe the risk of nuclear war has declined during the past decade, an equal number think the danger has increased.

"After the collapse of the Soviet Union, there has not been a warm, rosy glow in the minds of the public about national security," said Jenkins-Smith, director of UNM's Institute for Public Policy.

The result is that Americans continue to support maintaining a nuclear arsenal as a "security blanket" against an uncertain world, said UNM researcher Kerry Herron, co-author of the study.

"They are not yet ready to shuck that blanket," Herron said.

The study, financed by Sandia National Laboratories, was the third conducted by the institute since 1993. It allows UNM researchers and Sandia, an Albuquerque-based nuclear weapons laboratory, to track changes in public attitudes about nuclear weapons and national security over time.

The survey of 1,639 Americans was conducted last year, prior to nuclear tests conducted this spring by Pakistan and India. But even before those well-publicized tests, the public was afraid more nations would move to acquire the bomb, Jenkins-Smith said.

Fifty-five percent of those surveyed believed there is an increased risk of nuclear proliferation as a result of the breakup of the Soviet Union.

Herron said the data contradict what the researchers expected to find when they began the surveys.

As the Cold War receded in the public mind, they expected people to devalue nuclear security, to increasingly believe nuclear weapons are superfluous.

That has not happened.

While in a perfect world members of the public would like to eliminate nuclear weapons, 51 percent of those surveyed do not believe that would be feasible within the next 25 years.

So while there was strong support for reducing the nuclear arsenals of the United States and Russia well below their current levels of about 7,000 weapons, there was little support for the idea of reducing the United States' nuclear arsenal to zero.

Similarly, the survey found strong support for not reducing the United States' nuclear arsenal below that of China.

China has an arsenal of 400 nuclear weapons, according to the Natural Resources Defense Council.

The public views China with great trepidation and uncertainty, said Roger Hagengruber, the Sandia vice president who oversaw the survey.

Sandia paid the \$100,000 cost of the study because it places importance in understanding public perceptions of nuclear weapons, which is Sandia's primary mission.

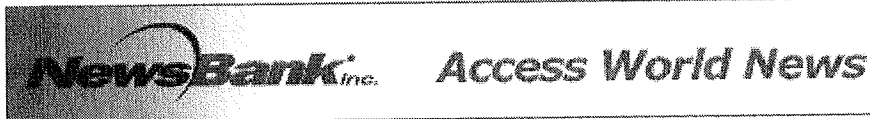
In a number of areas, the study's results closely parallel those of similar surveys conducted by arms control organizations, including a survey released last week by a coalition of anti-nuclear groups saying members of the public strongly support a continued halt to nuclear weapons test explosions.

But a skeptic Monday questioned whether a study financed by a nuclear weapons laboratory could objectively evaluate public attitudes toward the bomb.

Sandia funding could lead to bias in the study, said Greg Mello, one of the leaders of the Los Alamos Study Group, a Santa Fe anti-nuclear group. Mello had not read the study, which was released to the news media on Monday.

Hagengruber and Jenkins-Smith both said Sandia was careful not to try to influence the outcome of the survey.

"I have never seen the questions before they've been asked of the public," Hagengruber said.



Paper: The Denver Post

Title: Citizens believe in nuclear force, survey indicates China replaces Russia as major threat

Date: August 9, 1998

ALBUQUERQUE - Americans favor maintaining a nuclear arsenal as a security blanket against an uncertain world, says a survey conducted for a federal nuclear weapons laboratory.

"The American public firmly believes deterrence worked during the Cold War and still has a role," said Hank Jenkins-Smith, one of the University of New Mexico researchers who led the survey.

"But they are unsure about the role of nuclear deterrence in the future in what they believe will be a much more nuclear-proliferated international environment," he said last week.

The survey was done before a series of underground nuclear blasts by India and Pakistan, so Jenkins-Smith said he was unsure how that would change Americans' perceptions of nuclear deterrents.

Sandia National Laboratories paid \$100,000 for the study by the UNM Institute for Public Policy.

The random nationwide telephone survey of 1,639 Americans was conducted from June through November of 1997. It has a sampling error of less than plus or minus 3 percentage points.

The survey finds 55 percent of those polled believed there is an increased risk of nuclear proliferation because of the breakup of the Soviet Union.

The public would like to eliminate nuclear weapons in a perfect world, but 51 percent of those surveyed do not believe that would be feasible within the next 25 years.

The survey also finds that Americans now think of China instead of the former Soviet Union as the top nuclear nemesis of the United States.

The public views China with great trepidation and uncertainty, said Roger Hagengruber, a Sandia vice president who oversaw the survey.

But Jenkins-Smith said the survey took place before President Clinton's recent visit to China. Jenkins-Smith said he would be interested to see if Americans still think of China as their primary threat.

He also believes the survey shows that Americans are perceptive about international security concerns and foreign policy.

"Members of the public have beliefs and relate those beliefs in a rational way to their policy preferences," said Jenkins-Smith, a political science professor at UNM.

"It's very reassuring and quite heartening to me," he said.

Greg Mello, a leader of a Santa Fe anti-nuclear organization called the **Los Alamos Study Group**, questioned whether a Sandia-financed study could objectively evaluate public attitudes toward nuclear weapons.

Sandia funding could lead to bias in the study, he said. However, Mello said he had not read the study.

Hagengruber and Jenkins-Smith said Sandia was careful not to try to influence the outcome of the survey. He said he never saw the questions before they were asked of the public.

The study, the third conducted by the institute since 1993, allows UNM researchers and Sandia to track changes in public attitudes about nuclear weapons and national security over time.

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*Author: The Associated Press
Section: 1A SECTION
Page: A-38
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GAO Says Lab Doesn't Need Funds

8-10-98

By IAN HOFFMAN
Journal Staff Writer

A new congressional study suggests the U.S. Department of Energy has no need for \$65 million the agency has requested for four nuclear-weapons projects involving Los Alamos National Laboratory.

Tops on the list is \$30 million for Blue Mountain, a Los Alamos supercomputer billed as next year's world-record speed contender but beset by hardware and software problems.

In all, the General Accounting Office questioned \$175 million in 1999 funding requests by the Energy Department.

Energy officials charged the GAO, the investigative arm of Congress, with providing "a misleading and inaccurate picture" of its budget request.

The July 24 report found problems in four of five weapons-related projects that GAO accountants examined in depth:

- Redesign of the Nuclear Materials Storage Facility at Los Alamos might not require \$4.3 million in 1999 because the works likely to be delayed until 2000. Finished in 1987, the \$20 million plutonium-storage

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GAO Says Lab Doesn't Need Funds

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facility never opened because design flaws made it unsafe and unsecure. Making the building operational is projected to cost at least \$50 million.

DOE says the \$4.3 million would minimize delays between design and construction.

- Renovations of the Chemistry and Metallurgical Research building at Los Alamos are stalled by budget overruns as the Energy Department decides on changes in the project. The GAO identified potential cuts of \$11 million, and the DOE has not challenged the recommendation.

- Performing three or four explosive experiments with weapons-

grade plutonium at the Nevada Test Site would cost \$82 million, the DOE says. But the GAO quoted the site's contractor as saying the underground tunnels where the explosives are set off can only handle two so-called "subcritical" experiments a year. Up to \$20 million for additional experiments — including one planned by LANL scientists — is not needed, the report says.

The DOE still says the tunnels can handle four experiments a year.

- Silicon Graphics/Cray Research Inc. is unable to deliver a new, faster computer chip for LANL's Blue Mountain supercomputer, as called for in a \$121.5 million DOE contract, the report says. Blue Mountain also will not be ready for performance tests by December. As a result, the DOE

delayed payment of \$30 million to Silicon Graphics; the GAO report said the Energy Department therefore should not need \$30 million in next year's supercomputer budget.

The DOE argues that Blue Mountain is back on schedule and budget. Weapons scientists will use the computer to simulate the detonation of nuclear weapons to be sure they still work after aging, damage or remanufacturing.

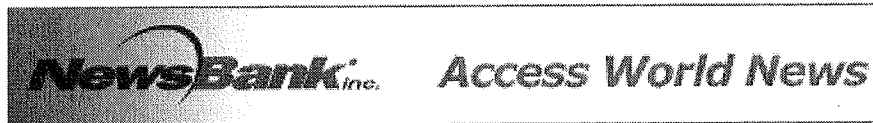
Yet the GAO report says the Energy Department simply agreed to accept a less advanced supercomputer. It will use larger numbers of older computer chips and yet cost the same, "raising questions as to why DOE is continuing this contract," the report noted.

Blue Mountain still is expected to be three times faster than the

world's most powerful supercomputer, at Sandia National Laboratories in Albuquerque. But, the GAO said, the computer will "be more difficult to program and will not represent another step forward in the state of the art" as Silicon Graphics' contract required.

Los Alamos supercomputer officials could not be reached for comment Monday. A lab spokesman said he had not seen the report.

"These are devastating critiques of the validity of DOE's budget requests for these items," said disarmament activist Greg Mello of the Los Alamos Study Group in Santa Fe. "In layman's terms what they're saying is the DOE doesn't know what it's doing but wants the money anyway."



Paper: Albuquerque Tribune, The (NM)
Title: IN BRIEF
Date: August 27, 1998

New study ordered on lab-fire potential

SANTA FE -- A federal judge has ordered the U.S. Department of Energy to conduct a more detailed study of whether a fire could break out at Los Alamos National Laboratory's top-secret plutonium research facility.

But Judge Stanley Sporkin of Washington, D.C., rejected a request by 39 anti-nuclear groups to order the agency to completely re-do a massive 1996 study of the potential health and environmental impacts of its stockpile stewardship program -- an ongoing effort to ensure the reliability of the nation's aging nuclear arsenal in the absence of underground testing.

Sporkin directed DOE to re-examine its previous findings on the plausibility of a buildingwide fire at the plutonium facility, known as Technical Area 55. He asked in particular for an evaluation of the odds that a fire could spread from a plutonium-handling chamber to the whole facility.

Sporkin also told DOE to evaluate whether a buildingwide fire could result from an earthquake or an act of sabotage.

The environmental coalition, which includes the Santa Fe-based Concerned Citizens for Nuclear Safety and the **Los Alamos Study Group**, was unsuccessful in an earlier bid to get Sporkin to halt the entire stewardship program.

Wire reports

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Section: Local News
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Paper: Santa Fe New Mexican, The (NM)

Title: More detailed study of LANL fire risks ordered

Date: August 27, 1998

A federal judge has ordered the Department of Energy to study in more detail the likelihood that a fire could break out at Technical Area 55, Los Alamos National Laboratory's top-secret plutonium research facility.

However, Judge Stanley Sporkin of U.S. District Court in Washington, D.C., rebuffed a request by a coalition of 39 anti-nuclear groups that DOE be required to completely redo a massive 1996 study of the potential health and environmental impacts of its "stockpile stewardship" program a 10-year, \$45 billion effort to maintain the nation's nuclear arsenal in a state of readiness in the absence of underground nuclear testing.

Previously in the case filed last year Sporkin rejected the coalition's bid to have the entire stewardship program halted. The coalition includes two Santa Fe groups Concerned Citizens for Nuclear Safety and the **Los Alamos Study Group**.

Los Alamos' TA-55 is a key facility in the stewardship program. It is where new plutonium "pits" or "triggers" would be manufactured to replace aging pits in the existing stockpile.

In an order issued last week, Sporkin directed DOE to "re-examine its previous determinations regarding the plausibility of a building-wide fire at TA-55."

In particular, Sporkin wants the agency to evaluate the odds that a fire could propagate from a plutonium-handling chamber called a "glove box" to TA-55 as a whole.

He also wants the agency to determine the chances that a building-wide fire could result from an earthquake or an act of sabotage.

Sporkin also called on the DOE to prepare a report on possible environmental and health impacts resulting from a DOE contingency plan to build as many as 500 pits annually about half the Cold War production rate.

Such a production level would only be turned to in the event of a worsening in the international situation. Current plans calls for the lab to build from 20 to 80 pits annually a fraction of the annual production rate of over 1,000 pits a year at the DOE's Rocky Flats plant near Denver.

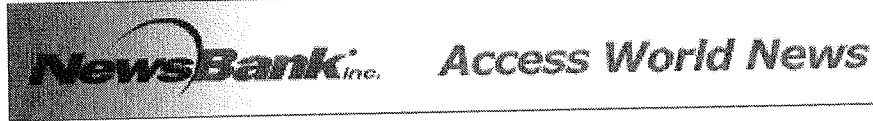
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Author: KEITH EASTHOUSE

Section: Local

Page: B-3

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Paper: Albuquerque Tribune, The (NM)
Title: IN BRIEF
Date: August 28, 1998

New study ordered on fire potential at lab

SANTA FE -- A federal judge has ordered the U.S. Department of Energy to conduct a more detailed study of whether a fire could break out at Los Alamos National Lab-oratory's top-secret plutonium-research facility.

But Judge Stanley Sporkin of Washington, D.C., rejected a request by 39 anti-nuclear groups to order the agency to completely re-do a massive 1996 study of the potential health and environmental impacts of its stockpile-stewardship program -- an ongoing effort to ensure the reliability of the nation's aging nuclear arsenal in the absence of underground testing.

Sporkin directed the DOE to re-examine its previous findings on the plausibility of a buildingwide fire at the plutonium facility, known as Technical Area 55. He asked in particular for an evaluation of the odds that a fire could spread from a plutonium-handling chamber to the whole facility.

Sporkin also told the DOE to evaluate whether a buildingwide fire could result from an earthquake or an act of sabotage.

The environmental coalition, which includes the Santa Fe-based Concerned Citizens for Nuclear Safety and the **Los Alamos Study Group**, was unsuccessful in an earlier bid to get Sporkin to halt the entire stewardship program.

Staff and wire reports

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LANL Unit Fire Threat Study Ordered

The Associated Press

A federal judge has ordered the U.S. Department of Energy to conduct a more detailed study over whether a fire could break out at Los Alamos National Laboratory's top-secret plutonium research facility.

But Judge Stanley Sporkin of Washington, D.C., rejected a request by 39 anti-nuclear groups to order the agency to completely re-do a massive 1996 study of the potential health and environmental impacts of its stockpile stewardship program -- an ongoing effort to ensure the reliability of the nation's aging nuclear arsenal in the absence of underground testing.

Sporkin last week directed the DOE to re-examine its previous findings on the plausibility of a building-wide fire at the plutonium facility, Technical Area 55. He asked in particular for an evaluation of the odds that a fire could spread from a plutonium-handling chamber to the whole facility.

Sporkin also told the DOE to evaluate whether a building-wide fire could result from an earthquake or an act of sabotage.

The environmental coalition, which includes the Santa Fe-based Concerned Citizens for Nuclear Safety and the Los Alamos Study Group, was unsuccessful in an earlier bid to get Sporkin to halt the entire stewardship program.

The plutonium facility, a key to the stewardship program, is where new plutonium "pits" -- the cores of nuclear bombs -- would be made to replace aging pits in the stockpile.

The judge also ordered the DOE to prepare a report on the possible health and environmental impacts of a DOE contingency plan to build up to 500 pits annually if needed. That would be about half the Cold War production rate.

Current plans call for the lab to build 20 to 80 pits a year.

DOE Eyes New Lab Weapons Facility

Renovations Costing More Than Expected

By IAN HOFFMAN
Journal Staff Report

9/1/98

A squat fortress of a nuclear chemistry lab — the largest building at Los Alamos National Laboratory — could be mothballed inside of 12 years and replaced by a new lab

at unknown cost.

Government nuclear-weapons managers are thinking about trying to sell Congress on a less ambitious version of a controversial 1984 proposal, the \$350 million Special Nuclear Materials Laboratory.

"It was a Cold War-era facility," said Earl Whiteman, a DOE weapons official in Albuquerque. Today, "the workload for it isn't near what it was when we had the Cold War going. But these are capabilities we need to support our (weapons) mission, and

nowhere else can provide them."

Lab executives resurrected the idea this spring for a new "nuclear chemistry and materials building" after a \$225 million fix-up of the Chemistry and Metallurgical Research Building ran into dire troubles.

Built in the early 1950s, the CMR building is a blockish, 550,000-square-foot monument of Cold War weapons research, then the largest construction project in New Mexico.

Its specialty today is actinide chemistry,

the analysis of plutonium, uranium and other materials in nuclear-weapons parts. CMR scientists also fashion uranium weapons parts and perform a smattering of other research on nuclear waste and energy.

Workers renovating CMR last year found the 46-year-old building was more contaminated, its electrical and safety systems more antiquated, than originally suspected. The result: a \$15 million overrun in the renovation's first phase, mostly replacing old

electrical circuits.

"The difficulties of identifying the building's deficiencies and estimating the cost to overcome them ... has drawn serious criticism," reported the lab's Actinide Research Quarterly, "and essentially a vote of 'no confidence' that actinide work within the building can be done safely with long-term consistency."

Having spent almost \$60 million, the lab and the U.S. Department of Energy la

See DOE on PAGE

DOE Eyes New Lab Weapons Facility

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year halted the work, intended to keep the building working 25 or 30 more years.

"We're saying, are we best off trying to put everything into this facility that's almost 50 years old or should we do something different?" said Whiteman, assistant manager for technology and site programs at DOE's Albuquerque Operations Office.

"The thing's almost as old as I am. You just wonder, does it really make sense?" Whiteman said.

Lab executives in March proposed the government close the building in 10-12 years. It was part of a plan to join operations of CMR and Technical Area 55, home of the lab's top-security plutonium facility, under new management.

The plan was driven partly by a

series of safety violations at CMR, the worst leading to a November 1996 explosion that wrecked a lab room. Lab managers later shut down the building's operations for almost six months. The latest proposal calls on the DOE to give the building more time than the rest of the laboratory to come into compliance with some safety requirements.

Lab critics discovered the proposal recently through a Freedom of Information Act request.

"The DOE has been telling Congress since 1990 that this upgrade (of CMR) is required for the whole building," said Greg Mello, head of the Los Alamos Study Group in Santa Fe. "So the DOE has been singing one song to Congress for this entire decade, and now the DOE says they haven't made the decision about what to do with this building."

The DOE's contractors admit they did not foresee the full amount of work required for the renovations.

Activists also doubt the need for a new building to replace CMR.

"The questions the prudent taxpayer might be asking is how many millions more will be pumped into this building before it is abandoned and how many millions more will be pumped into the next building for dubious purposes," Mello said.

The DOE's Whiteman said the actinide chemistry related to weapons work at the Chemistry and Metallurgical Research building is unique.

"There are capabilities that exist at CMR that don't exist anywhere else in the United States," he said.

No decision on CMR is likely until at least December, when the lab is to deliver detailed studies to the government on each safety system

in the building and on the potential for earthquakes nearby — a factor that could boost the cost of continued renovations.

If the Energy Department chooses to operate the building only for 10 or 12 more years, Whiteman said, "we would be spending significantly less on upgrading it. I can't give you an estimate, but it would be significantly less."

The new nuclear chemistry and materials research lab, if built, probably would be sited near or at Technical Area 55, closer to the plutonium facility. The CMR building at Technical Area 3 ultimately would be decontaminated and possibly demolished.

"If we were to leave CMR, we would need to clean up behind ourselves," Whiteman said.

LANL Celebrates New Waste System

Treatment Removes Radioactive Particles

By IAN HOFFMAN
Journal Staff Writer

9/2/88

Every working day, scientists drop an average 20,000 gallons of radioactive liquid into drains at Los Alamos National Laboratory.

By dribs and gushes, this soup runs in a network of 1,600 pipes to an aging treatment plant.

What later flushes into Mortandad Canyon has exceeded federal radioactivity guidelines for seven years, occasionally up to 15 times the limit.

LANL's top waste manager declared those days nearly over Tuesday. If all works as designed, a new technology of reverse osmosis and spinning "ultra" filters will start scouring the discharge in late January. Plutonium and many other

"hot" particles will be removed to vanishingly tiny amounts, about a tenth as radioactive as, well, beer.

"I want to be the first to drink a glass of this water in January," said a glowing Tom Baca, LANL's director of environmental management.

Spectators at a ribbon-cutting for the upgraded liquid waste plant got a "fact sheet" stating the new equipment "will treat and discharge industrial waste water in accordance with all federal, state and local regulatory requirements."

In truth, it won't. And Baca's drink still will be a cocktail of radioactive and chemical wastes, with five times the state drinking-water standard of one pollutant.

The new technologies could bring the lab into compliance with the U.S. Department of Energy, which owns the lab and regulates radioactivity in its liquid waste.

But the plant will not meet state pollution regulations. And the state



EDDIE MOORE/JOURNAL

TUBULAR ULTRAFILTER: Steve Hanson, with LANL's Environmental Management, talks about the new Tubular Ultrafilter that will be used to filter some of the radioactive elements from the lab's waste water.

still wants LANL to propose ways to deal with 35 years of discharge into Mortandad Canyon. Almost 50 million gallons of liquid waste have contaminated the canyon's shallow ground water to above state or federal standards with nitrates, tritium and radioactive strontium-90.

And the New Mexico Environ-

ment Department is far from satisfied with the lab's delay in proposing a treatment for nitrates.

"I would say we're concerned," said NMED spokesman Nathan Wade. "We're contemplating an enforcement action at this moment."

See LANL on PAGE 3

LANL Celebrates New Waste System

from PAGE 1

Baca's glass also could contain radioactive tritium at levels up to 75 times the federal drinking-water standard, depending on lab activities that week. (Via an odd loophole, the tritium is technically not regulated because it was produced in a reactor, not an accelerator, even though both kinds pose exactly the same health hazard in drinking water.)

Baca can drink his water without fear — the standard is based on 70 years of daily guzzling. But he probably shouldn't share his glass with an infant.

The water would be rich in nitrate. For infants, long-term ingestion of nitrates can block oxygen uptake and cause "blue-baby syndrome."

That's what worries state regulators about the lab's waste water.

In its attack on nitrates, the state's

ground water pollution prevention regulators are pushing dozens of faulty human waste water plants and the livestock-waste lagoons at dairies for new ground water discharge plans that enforce state nitrate standards. In 1996, after 19 years, regulators also began prod-ding Los Alamos National Laboratory, so far to little result.

LANL had proposed adding a bi-denitrification system, in essence tanks of nitrate-eating bacteria, to begin treatment last June. But its supplier, SKF Inc. of Charleston, S.C., is seven months behind on delivering the \$392,000 system, and lab officials contend the system may not meet specifications.

The lab is mulling a breach of contract lawsuit. Meanwhile, a consultant is doing a 20-week study of other technologies.

"It's a matter of time and cost and legal issues," said Steve Hanson, head of the lab's liquid radioactive

waste group.

This leaves LANL with no clear plan for treating nitrates, after getting state regulators to agree to at least three delays to come up with such a plan.

"We're looking at short-term options for hitting the nitrate mark," said Joe Vozella, assistant area manager of the environment for the DOE.

Such "quick and dirty solutions," as one lab official put it, would include simply diverting the nitrate-contaminated waste water to a storage tank and gradually concentrating it so more could be added to the tank.

This in theory could buy the lab another 16 months to devise a treatment plan, if the idea placates state regulators.

"Hopefully, I hope we're showing good-faith efforts to come into compliance," DOE's Vozella said.

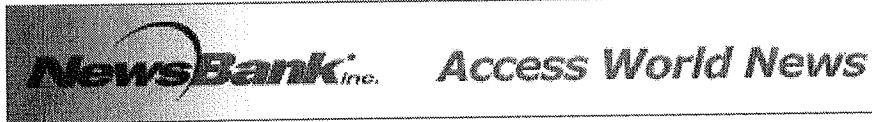
"I don't know what to expect from

the state," said the lab's Hanson.

Environmentalists are irate at the lab's continuing pollution of Mortandad Canyon and its shallow ground water. No one is certain whether any is filtering 700 feet down to deeper ground water used for drinking water.

"The laboratory has missed several deadlines. When are they going to meet one? It's not a mom and pop operation," said Greg Mello of the Los Alamos Study Group in Santa Fe. "Mortandad Canyon is a mess, they should stop making it worse and start cleaning it up."

Baca's ultimate vision is "zero discharge" to the canyon: All liquid radwaste would be treated and fed back to LANL facilities for reuse, for example as cooling water. A June 1998 lab study recommends "zero discharge" but says it is 5-10 years away.



Paper: Santa Fe New Mexican, The (NM)
Title: LANL may build new chemistry building
Date: September 2, 1998

Officials at Los Alamos National Laboratory and the Department of Energy are exploring the possibility of building a new nuclear chemistry building at the lab.

The new building which would replace the 45-year-old Chemistry and Metallurgical Research Building would not be built anytime soon. DOE and lab officials are talking about it becoming operational no sooner than 10 to 15 years from now.

The lab is in the middle of upgrading the CMR building so that it can play a role in the lab's new mission of building plutonium "pits" or triggers to replace aging pits in the nation's nuclear stockpile.

The original plan was to upgrade CMR at a cost of \$225 million. But the project has been plagued with difficulties, leading lab and DOE officials to consider carrying out a smaller upgrade to keep CMR functional for the next 10 year and then turning to a new facility.

Lab officials had previously indicated that building a new facility would be a preferable option than pouring large amounts of money into sprucing up the aging CMR building.

Information that the lab and DOE are actively considering a new facility is contained in government documents from this past spring that were uncovered by a Freedom of Information Act request filed by the **Los Alamos Study Group**, a Santa Fe activist organization.

The new facility is reminiscent of a controversial lab proposal in the 1980s to build a "Special Nuclear Materials Laboratory." The proposal was eventually shelved by Congress as being too expensive.

In an interview last week, DOE official Earl Whiteman said the new facility would be a scaled-down version of the nuclear materials lab.

Whiteman also said that lab and DOE officials are gathering information about the CMR facility including its ability to withstand earthquakes and will probably make a decision in about six months about the extent to which CMR will be upgraded.

If a decision is made to eventually go with a new building, a formal proposal to Congress for funding is probably about three to four years away, Whiteman said.

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Author: BY KEITH EASTHOUSE The New Mexican
Section: Local
Page: B-3
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LANL may build new chemistry building

BY KEITH EASTHOUSE
The New Mexican

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DOE Cites Lab Failure To Prevent 1996 Blast

from PAGE 1

our sites meet our high nuclear safety standards, and we impose penalties on those who do not meet these standards," said Peter N. Brush, the DOE's acting assistant secretary for environment, safety and health.

A room in the lab's Chemistry and Metallurgical Research Building in Los Alamos was destroyed in November 1996 after a worker mistakenly put the wrong materials in an oven, which then exploded.

Investigators found the explosion probably would have killed or severely injured anyone had they been in the room.

The lab and the DOE agreed to several "corrective actions" to pre-

vent accidents in the future. Lab managers shut the building down last November for seven months due to continuing safety problems. And lab executives turned the building over to other senior managers.

"After the CMR explosion, there were ongoing problems that just didn't stop," DeLucas said.

The DOE found the lab's actions were too little too late and issued the enforcement notice.

DeLucas said the laboratory today is more aware of safety issues, and most workers no longer view safety as an empty, bureaucratic exercise.

"Now we're internally driven, we watch ourselves so people can go home safe at night," she said.

DOE Cites Lab Failure To Prevent 1996 Blast

Journal Staff Report ^{9/25/98}

The U.S. Department of Energy took enforcement action Thursday against Los Alamos National Laboratory for the lab's failure to correct problems that led to a November 1996 explosion and fire.

The DOE would have assessed a \$112,500 fine against the lab's manager, the University of California, but the university is exempt from any fines as a nonprofit federal contractor.

Thus the enforcement action amounts to a paper notice of violation.

Critics say the university has no incentive to fix environment, health or safety problems as long as it is not at risk for fines.

But a lab spokesman said that, even without the fine, the enforcement action Thursday sent the message to lab executives that they needed to better protect worker health and safety.

"I think there are a lot of lessons we learned from that," spokeswoman Kathy DeLucas said.

In all, the Energy Department took enforcement action Thursday against four contractors that operate LANL, the Idaho National Engineering and Environmental Laboratory, Oak Ridge National Laboratory and the Savannah River Site.

LANL's violation was the most severe, judging by the potential assessed fine.

"We demand that contractors at

See DOE on PAGE 3

DOE cites safety troubles at LANL facility

9/25/98

By KEITH EASTHOUSE
The New Mexican

The Department of Energy has cited the University of California for continued safety problems at a key Los Alamos National Laboratory nuclear facility.

However, because of the university's non-profit status, the DOE is powerless to penalize the university. If it had such power, UC would be fined \$112,500 for continuing safety infractions at the lab's 45-year-old Chem-

istry and Metallurgy Research facility, according to a DOE statement issued Thursday.

UC is specifically exempt from a 1988 federal law designed to give DOE some leverage over its nuclear facilities contractors.

"The whole purpose of (the law) was to put teeth into DOE oversight. What you have in fact is that all the teeth were pulled because they can't fine the lab," lab critic Chris Mechels said Thursday.

"The lack of civil penalties makes accountability at the lab a sham," Mechels said.

According to the DOE, serious safety problems remain at the Chemical and Metallurgy Research facility, site of a dangerous explosion in November 1996 that luckily did not result in any serious injuries.

Despite repeated warning from DOE to improve safety at the building, "numerous deficiencies" remain, the statement said. They include unauthorized maintenance work and a failure to restrict access to contaminated areas.

Efforts to reach a lab spokesperson for comment were unsuccessful.

Legislative committee OKs \$4.3 billion for nuclear weapons-testing program

► The money will provide nearly all the money the DOE needs to operate its stockpile stewardship program

By KEITH EASTHOUSE
The New Mexican

The U.S. Department of Energy will get 95 percent of what it wanted in the upcoming federal fiscal year for its ambitious stockpile stewardship nuclear weapons program.

A House-Senate conference committee on Friday approved \$4.3 billion in 1999 funding for stewardship. That's about \$200 million less than the DOE requested, but it's about \$100 million above current funding.

President Clinton is expected to approve the funding levels for stewardship, an ambitious effort to maintain the nation's nuclear arsenal in a state of readiness in the absence of underground testing.

"The bulk of this bill is designated to keep our nuclear stock-

pile safe and secure in this era of underground test bans. Los Alamos and Sandia share in the national responsibility for keeping our aging stockpile safe and reliable, and as such will share in using the funding in this bill," Domenici said in a prepared statement.

The continued strong funding of the stewardship program came as no surprise to nuclear critics.

"Last spring my feeling was that Congress would use an X-acto knife rather than an axe (on the stewardship budget). That's about what happened," said David Culp of Plutonium Challenge, a Washington D.C.-based group.

In terms of Los Alamos National Laboratory, the X-acto knife did some damage to a couple of stewardship-related projects.

The ongoing effort to upgrade the 45-year-old Chemistry and Metallurgy Research building so that it can play a major role in supporting work related to manufacturing plutonium triggers for nuclear bombs received a major setback.

Instead of the \$16 million that the lab had been hoping for in 1999, only \$5 million will be made available for the upgrades. The funding reduction is a reflection of congressional impatience with a project that has been plagued

by delays due to poor lab management of the project and the unexpected difficulty of sprucing up the aged facility.

Another project — this one to renovate the nuclear materials storage facility — also was targeted for cuts. Instead of getting \$9.2 million for 1999, the lab will receive only \$3.8 million — less than half of what was requested.

On a more positive note, the flagship stewardship facility at the lab — the \$260 million Dual Axis Radiographic Hydrotest Facility, a giant X-ray camera — is being fully funded.

So is the National Ignition Facility, a football-field sized laser complex being built at Los Alamos' sister lab, Lawrence Livermore National Laboratory in California.

Culp predicted that funding for stewardship will also be secure in the 2000 federal fiscal year, which begins next October. He said that Republicans are

planning on boosting defense spending next year. With money less tight than it was this year, stewardship is more likely to receive full funding.

Nonetheless, Culp said that Congress has made it clear that it won't blindly give DOE what it wants — \$4.5 billion for 10 years.

DOE officials "are going to have to come up here every year and make the case" for stewardship programs, Culp said.

* We have written & invited staff on these projects, apparently with some success.



Edition--Journal North Date--10/02/1998 Page-- 1

Nuke Arms Foes To Target Lab

Ian Hoffman Journal Staff Writer

Groups Planning March in Summer

One October morning, workers heading to Los Alamos National Laboratory ran into a snarling traffic jam, their bumpers blocked by dozens of hand-holding protesters like 15-year-old Ame Solomon.

"I sat down in front of all those cars. People were screaming at me, 'I want to go to work,'" recalled Solomon, now 30. "I was high as a kite. I felt so empowered."

Arrests of the more than 30 protesters in 1983 marked the first and last hurrah for civil disobedience aimed at a nuclear New Mexico.

Activists since have slipped into the woodwork of mainstream advocacy, plying politicians and the media to slow the nuclear-arms race, with modest success.

A renewal of in-your-face activism could be around the corner, however.

A spectrum of anti-LANL interest groups -- from disarmament activists to full-bore opponents of all things nuclear -- are mulling new campaigns targeting the federal weapons labs in Los Alamos and Albuquerque, as well as their sponsors in Congress.

Peace Action, billing itself as the nation's largest grassroots disarmament group, is inviting hundreds of activists from 28 states next summer for a mass march on the lab.

Said Peace Action organizer Bruce Hall: "We want to step up the level of activism and help the disarmament movement focus more on what to us is a major driver of the nuclear arms race. And that's Los Alamos."

This brand of political statement reflects a growing frustration over the persistence of nuclear arsenals and richly funded weapons science in the post-Cold War era. As a result, local and national environmental and peace groups are seeking new ways to court public opinion, including marches and lawsuits.

Beyond its status as birthplace of The Bomb, LANL's role as the premier U.S. facility for plutonium research and the lab's return to weapons production make it an ideal focal point.

"This is something that hasn't been tapped and I think it could energize people," Hall said from the group's headquarters in Washington, D.C. "I think from groups like Peace Action you're going to see a lot of stepped up activity in the Santa Fe-Los Alamos area."

One literal sign of confrontational times to come cropped up Thursday beside U.S. 285 near Pojoaque: A blazing-red billboard invoking the Catholic Church's 1997 denunciation of nuclear weapons.

"Nuclear weapons are incompatible with the peace we seek for the 21st Century," reads the billboard, quoting Archbishop Renato Martino, the Holy See's Permanent Observer to the United Nations.

The billboard and more like it are the work of the Los Alamos Study Group, a Santa Fe disarmament organization.

Another billboard, slated for I-25 near Bernalillo, sports a crimson mushroom cloud and calls New Mexico the "World Capital of Weapons of Mass Destruction."

Two outdoor advertising firms refused to display another of the group's billboards contrasting New Mexico's leadership in weapons science with its bottom-rung ranking as a place to raise children.

"What we want people to realize is, New Mexico has not fared well under the theory that it could base its economy on weapons," said the study group's leader, Greg Mello.

"We are an addicted culture," he said. "The first step is to recognize our addiction and stop kidding ourselves. We have put weapons above people and made destruction more important to us than building our families and communities."

Mello has despaired of reaching the public through mainstream media. He charges reporters with complacency in the face of evidence that the weapons labs are promoting new missions and legitimacy for their weapons.

The two-story billboard messages are aimed at lab employees, New Mexico voters and tourists, Mello said. But the indirect target is the state's senior U.S. senator, warmly known in lab circles as "St. Pete" for his avid defense of lab appropriations.

"This is a challenge to Pete Domenici. His legacy here in New Mexico has been one of poverty," Mello said. "It's time to put society's resources into genuinely productive activities. The economic and political fallout of nuclear-weapons work is very real."

LANL officials are not so sure they foresee an upswing from the last decade of low-key activism. But they take controversy as a corollary of the lab's work.

"We're in the national-defense business, and that means defending the ability of people to speak their minds," said Bill Heimbach, a lab spokesman. "We just ask they do it within legal boundaries."

PHOTO BY: EDDIE MOORE/JOURNAL

PHOTO: Color

Henry Bauer, left, John Guerro, top, and Tim Walters of Donrey Outdoor Advertising put up the new sign by the Los Alamos Study Group along Highway 285.

Group plans LANL anti-nuke protest

LOS ALAMOS — Anti-nuclear activists say they are planning a major protest next year at Los Alamos National Laboratory.

Peace Action said it's recruiting hundreds of activists from 28 states for a mass march on the lab next summer.

Peace Action organizer Bruce Hall said the group is frustrated over the persistence of nuclear arsenals and well-funded weapons programs around the nations.

Hall said the Washington-based group is the nation's largest grassroots disarmament organization. He says national environmental and peace groups are using marches and lawsuits to court public opinion.

The Los Alamos Study Group has aided Peace Action by putting up billboards across the state. One billboard sports a crimson mushroom with the words "New Mexico, World Capital of Weapons of Mass Destruction."

Lab officials said such protests come with the job.

Staff and wire reports

New Mexico
10/4/98

Anti-nuke group says protest aimed at LANL

LOS ALAMOS — Anti-nuclear activists say they are planning a major protest next year at Los Alamos National Laboratory. ^{10/3/98} frustrated over the persistence of nuclear arsenals and well-funded weapons programs around the nations.

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New Mexico
"We want to step up the level of activism and help the disarmament movement focus more on what to us is a major driver of the nuclear race," Hall said. "And that's Los Alamos."



Paper: Santa Fe New Mexican, The (NM)
Title: Region in brief
Date: October 4, 1998

Richardson looks into health problems

U.S. Energy Secretary Bill Richardson said he will investigate reports of health problems among people living near or working at federal nuclear weapons plants and research facilities in New Mexico and 10 other states.

Some 410 people told The Tennessean newspaper they suffer from unexplained illnesses including tremors, memory loss, fatigue and a variety of breathing, muscular and reproductive problems. Their doctors cannot explain why they are sick.

No direct link has been established between the illnesses and the U.S. Department of Energy sites. But doctors, scientists and lawmakers say it's large enough to warrant a comprehensive study to try to find the cause.

"I'm going to follow this," Richardson, a former New Mexico congressman, said after a private meeting Friday with residents near the former Rocky Flats nuclear weapons plant in Golden.

"My view is we ought to get to the bottom of this. I want to be absolutely sure we're erring on the side of making sure there are no problems," he said.

Scientists have been concerned for decades about radiation from nuclear production and its link to cancer. But no one has ever looked into noncancerous illnesses.

Youth group urges making a difference

Members of Our Lady of Guadalupe Catholic Church youth group will release 100 balloons at 11 a.m. today at the church at 417 Agua Fria St. to urge local participation in the 8th Annual Make A Difference Day on Oct. 24.

Make a Difference Day, sponsored by USA Weekend magazine, calls community, youth, civic and fraternal groups to give to their communities through projects that benefit the less fortunate.

In 1994 and 1996, the Our Lady of Guadalupe Church youth group was selected as a Newman Foundation national award winner based on their volunteer work.

This year's service projects will benefit St. Elizabeth's Shelter, Santa Fe Habitat for Humanity, Bienvenidos, the state Protective Services Division and Birthright.

Harvest festival honors settlers

A colorful array of coat-of-arms will be displayed during the second day of the Harvest Festival today at El Rancho de las Golondrinas.

The Spanish Colonial living museum is 15 miles south of Santa Fe. Take exit 276 off southbound Interstate 25 and exit 276B from northbound I-25. The festival is scheduled from 9 a.m. to 4 p.m.

Banners honoring the first Spanish settlers will be carried in the San Ysidro procession 9 a.m. today, which precedes an outdoor Mass.

Group plans LANL anti-nuke protest

LOS ALAMOS Anti-nuclear activists say they are planning a major protest next year at Los Alamos National Laboratory.

Peace Action said it's recruiting hundreds of activists from 28 states for a mass march on the lab next summer.

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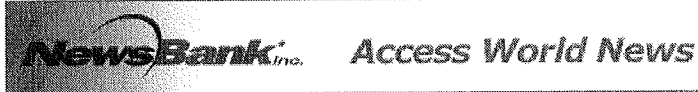
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Lab officials said such protests come with the job.

Staff and wire reports

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Paper: Santa Fe New Mexican, The (NM)
Title: Anti-nuclear billboard landing near airport
Date: October 30, 1998

Along with the billboards advertising cheap motels, fast food and turquoise jewelry, travelers leaving the Albuquerque airport will soon see a more unusual promotion: A photograph of the Jemez mountain range, faintly glowing green with a caption~ reading: "Welcome to New Mexico: America's Nuclear Colony."

The billboard, paid for by the Santa Fe-based **Los Alamos Study Group**, is scheduled to appear today at the intersection of Gibson and University Avenues, said Greg Mello, director of the group.

"We hope we can awaken New Mexico and create a public debate around whether weapons of mass destruction should be the basis for the state's economy," he said.

Mello said the words and images were chosen carefully: New Mexico is called a colony, because the state "doesn't really have a great deal of control over its own economic future," and like a colony, ranks near the bottom of social and economic indicators. The green glow, created by retouching the photograph, signifies, "our environmental liabilities."

"It was retouched to show what you can't see," he said.

Los Alamos National Laboratory spokesman Jim Dannieskold said the lab has no problem with the anti-nuke billboards. "The lab provides the technical underpinnings of the U.S nuclear deterrent whose purpose is precisely to protect the free speech rights of the **Los Alamos Study Group** and others," Dannieskold said.

The billboard joins another anti-nuclear ad posted on U.S. 285 earlier this month, which quotes the Vatican and admonishes nuclear weapons as "incompatible with the peace we seek for the 21st century."

A third sign, displaying a mushroom cloud and reading New Mexico: World Capital of Weapons of Mass Destruction," appeared Thursday near the Bernalillo exit on Interstate 25. The sign is visible to drivers heading north.

Those heading south will see what's on the other side of that sign: an ad for Wendy's Old Fashioned Hamburgers.

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Author: BARBARA FERRY
Section: Local
Page: B-1
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Journal North 11-5-98

Asia Arms Race Topic of Talks

Journal Staff Report

Four scientists — natives of India, Pakistan and the United States — will delve into the world's latest nuclear arms race in public talks Thursday and Friday.

A pair of Princeton researchers will join two Los Alamos National Laboratory arms-control analysts to discuss last spring's Indian-Pakistani nuclear tests, U.S. nuclear policy and the implications for global arms control.

Today's forum, the more technical of the two, is from 2 p.m. to 4 p.m. in the Jemez and Cochiti rooms of the lab's J. Robert Oppenheimer Study Center. The second talk is at 7 p.m. Friday at Fuller Lodge in Los

Alamos.

Both are open to the public.

Among the speakers are Maurice Bryson, head of LANL's International Policy and Analysis programs, and Dave Thomson, a LANL arms-control consultant who is a member of Los Alamos Citizens for Arms Control and International Security.

They are joined by two physicists and researchers at Princeton's Center for Energy and Environmental Studies with expertise in South Asia's nuclear politics.

Zia Mian founded Pakistan's first nuclear disarmament group and writes on nuclear and political issues.

M.V. Ramana, a native of India, is a U.S.-trained theoretical physicist who is writing a history of India's nuclear complex.

LANL proposes \$200 million in construction

New
Mex
11-6-98

By KATHLEENE PARKER
The New Mexican

LOS ALAMOS — Los Alamos National Laboratory is about to embark on a massive building program that will dramatically change the face of the lab's core area.

The initiative, if funded by Congress, will bring a significant construction boom to Northern New Mexico, beginning perhaps as early as January 2000.

The main thrust of the effort will be construction of several hundred thousand square feet of buildings in vicinity known as Technical Area 3, between Diamond Drive and Pajarito Road.

The improvements will cost at least \$200 million and probably much more, depending on when and if the sprawling Chemical and Metallurgy Building is also replaced.

The construction initiative is predicated on what the lab believes is the need for new buildings and infrastructure to replace outdated facilities, including the lab's huge administration building, a secure facility just west of Diamond Drive, said Jim Holt, program director for Institutional Facilities and Construction.

It is also based on the U.S. Department of Energy's nationwide Strategic Computing Initiative, which will require using some of the world's largest computers at several national laboratories, including LANL, as part of the so-called Stockpile Stewardship Program.

That program is meant to assure the safety and reliability of the nation's nuclear weapons stockpile. The computers, among other things, will simulate a nuclear detonation in the absence of underground nuclear testing.

But local peace activists are critical of much of the construction proposal.

The construction initiative is predicated on what the lab believes is the need for new buildings and infrastructure to replace outdated facilities.

"I don't understand why we need to have brand-new buildings to carry out antiquated missions," especially when society has so many far more urgent needs and when parts of existing lab buildings are empty, said Greg Mello of Santa Fe's Los Alamos Study Group.

The thrust of the overall construction effort is to revamp a hodgepodge of buildings at TA-3 into a parklike area similar to one at Lawrence-Livermore National Laboratory, Holt said.

LANL has suffered from a lack of planning since its earliest days, LANL spokesman Jim Danneskiold said.

"It was a Manhattan Project tradition to just throw up a Quonset hut," said Danneskiold, referring to the top-secret World War II project that in less than three years developed the first atomic bombs at Los Alamos.

The lab's outdated facilities are a hindrance to attracting new researchers, Holt said.

Direct funding may be sought from Congress, or the lab could seek investors to construct the buildings, with a lease-to-buy option by the lab, he said.

If improvements are made as

Continued from Page B-1

hoped, 145 trailers and so-called transportable buildings would be removed and several older buildings, including the administration building, will be razed, Holt said.

Diamond Drive and Pajarito Road would be moved to reroute traffic away from TA-3.

A park might be built on the site of the current administration building.

More than 845 employees at TA-3 work in temporary facilities, a lab information packet states.

Construction proposals are:

■ The Los Alamos Strategic Computing facility is a top priority and Holt

said it could be completed by 2002.

The 267,000-square-foot, three-story facility proposed for just west of the northbound portion of Pajarito Road initially will house a 30-TeraOps super-computer capable of doing 30 trillion calculations a second. This might be replaced later with a 100-TeraOps computer for defense research and research considered of national importance, such as global warming study, he said.

The building, estimated to cost \$100 million, will be a dual-use building divided into a secure and a non-secure area, including 43,000 square feet for the computer. The rest will house 300 offices, he said.

The computer will cost another \$100 million.

By 2004, half of all weapons experts familiar with nuclear tests will have retired, Danneskiold said. Computing facilities need to be operational so that remaining weapons experts can validate computer programs to simulate a nuclear explosion, before the remaining experts retire, he said.

But the supercomputing center, in particular, irks peace activists.

"We already know existing warhead designs will work if we stick with that design," Mello said.

Those warheads can be maintained in readiness by replacing parts as needed with parts already known to be reliable,

Mello said.

"The only thing that is driving the acquisition of new computers is the design of new nuclear weapons, period," despite DOE's statements to the contrary, he said.

■ The Non-Proliferation and International Security complex is proposed for just south of the new computing facility and will be roughly 130,000 square feet, again with classified and non-classified sections.

The construction of the roughly \$50 million facility is proposed to coincide with that of the computing center.

■ The lab administration building, which dates from the 1950s and rests on a geologic fault, is inadequate for 1990s

work, Holt said.

"We do not even have the power to run all the PCs in the building," and improving wiring, plumbing and other infrastructure would be more costly than a just building a new structure, he said.

No location has been finalized, but a new building to house 800 people would be about \$60 million, he said.

■ The existing 550,000-square-foot CMR complex does chemical testing to assure the integrity of nuclear weapons, but dates from the early Cold War.

Plans are still preliminary, but replacement or modernization will be complicated by the building's status as a nuclear weapons facility, Holt said.

LANL *Journal North*
11/6/98

Proposes Biowarfare Analysis

Nuke Facility Seeking Anti-Terror Funding

BY IAN HOFFMAN
Journal Staff Writer

The federal nuclear-weapons lab in Los Alamos is thinking of building a lab for genetic analysis of potentially lethal bacteria, among them organisms intended by terrorists or foreign nations for use as weapons.

Inside the tiny lab, scientists in gloves and surgical scrubs would use cutting-edge genetics to "fingerprint" the DNA of pathogens such as those that cause anthrax and botulism.

Executives at Los Alamos National Laboratory think the new lab could help guarantee Los Alamos a piece of federal anti-terrorism funding, which soared to \$3 billion this year.

"We hope it's going to grow," said nuclear physicist Hans Ruppel, LANL's acting associate director for strategic and supporting research. "We recognize what motivates Congress — national security — and we'll respond to that."

LANL also envisions the new lab hosting joint research into infectious diseases with the University of New Mexico and the state.

The lab would occupy a windowless, 230-square-foot room inside an empty aluminum building at LANL's Technical Area 54, not far from the lab's burial trenches for low-level radioactive waste.

The lab would feature double doors; negative air pressure and full-time filtered air — all designed to keep biological agents from escaping.

Disease researchers call this a biosafety level 3 or BSL-3 lab, and it's a standard facility at major U.S. universities and pharmaceutical firms. Two are known to exist in New Mexico, both used by UNM in Albuquerque primarily for research into tuberculosis and hantavirus.

"It's good for science in New Mexico to have this capability. I would urge them to proceed," said virologist Brian Hjelle, who regularly works in UNM's BSL-3 labs and developed the leading test for hantavirus. "The risks these facilities pose to the community are about as close to zero as you can get."

LANL can work with some live biological agents now but wants the extra safety of the new laboratory for its workers.

Activists are nonetheless leery of LANL's move

*"We recognize
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HANS RUPPEL,
ACTING ASSOCIATE
DIRECTOR
FOR STRATEGIC
AND SUPPORTING
RESEARCH

LANL Proposes Biowarfare Analysis

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toward handling live biowarfare agents, saying the work could raise suspicions among other nations and perhaps provide cover for countries seeking bioweapons as an inexpensive alternative to nuclear arms.

"This creates *prima facie* problems of compliance with the Biological Weapons Convention. Why locate this at a facility whose primary function is development of offensive nuclear weapons?" asks University of Illinois law professor Francis Boyle, a member of the Council for Responsible Genetics, an anti-biological weapons advocacy group.

"You can imagine the way the Third World is going to see it: We say don't do this, meanwhile our own people are putting dual-use research into a known weapons lab," said Boyle, who authored the 1989 Bioweapons and Anti-Terrorism Act, which outlaws manufacture of biological weapons.

Level 3 labs protect workers and the public against exposure to organisms better than most hospital labs but less than the nation's two biosafety level four labs, used by the U.S. Army at Fort Detrick, Md., and the Centers for Disease Control and Prevention in Atlanta to handle the most lethal viruses, such as smallpox and Ebola.

LANL's lab is one of at least three

that are contemplated by the U.S. Department of Energy, the others proposed for Oak Ridge and Lawrence Livermore national labs in Tennessee and California.

They would join the U.S. Army Medical Institute of Infectious Diseases as the nation's only labs performing defense research using live biowarfare and bioterrorism agents.

Roughly half the lab's work would be in the national-security arena, for the Federal Bureau of Investigation, the U.S. Department of Defense or other federal agencies, lab officials said.

"The FBI wants the answer now: Is it a viable organism? What strain is it?," said biophysicist Scott Cram, director of LANL's Life Sciences Division, citing an example of the lab's proposed work.

Samples of tissue or dirt — for example, collected by a United Nations inspection team — would arrive by Federal Express, in triple-layered packaging. Molecular biologists would use LANL-pioneered advances in DNA fingerprinting to identify any suspected biological warfare and bio-terrorism agents.

"We have a broad suite of technologies that I think is unrivaled to address the bio-terrorist threat and naturally emerging threats" such as hantavirus and influenza, said Ruppel. "This is an opportunity to

address human needs. I think we have a moral obligation to do it."

The rest of the new lab's work would be joint research with the New Mexico Department of Health and the University of New Mexico, both of which are eager for help with infectious-disease research.

"This is world-class technology that we can bring to bear on the problems and needs of New Mexicans," said Dr. Gary Simpson, a state infectious-disease specialist.

The number of BSL-3 labs in the United States is unknown because they are not licensed or regulated by any federal agency. Workers in such labs have been infected, mostly by tuberculosis, but there are no recorded infections of humans or animals by organisms escaped from a BSL-3 lab in the United States.

"The potential for people being infected by influenza is, day to day, far greater by orders of magnitude than for them to be infected by material released from a Level 3 laboratory," said Dr. Robert W. McKinney, a veteran virologist and director of safety for the National Institutes of Health.

Lab critics are not persuaded of the new lab's benefits.

"What is the added value of one of these facilities at a weapons lab?" asks Greg Mello of the Los Alamos Study Group in Santa Fe.

"There's a difference when

you've got a biological-weapons research facility at a top-secret nuclear laboratory with a long-standing culture of compartmentalization and secrecy," he said.

LANL officials said the lab will work only with bacteria, not viruses and not lab animals. Scientists will grow up to two teaspoons of bacteria in a broth for their analyses, said LANL's Cram. He plans to let visitors peer into the room to verify the lab is not engaged in production-scale growth of biological agents or research into bioweapons for offensive use.

"We won't have any fermenters out there," Cram said. "We don't want to do it. We're not licensed to do it. We have no intention to do it. And at least on my watch, it won't happen."

LANL molecular biologist Paul Jackson, who would be director of the new lab, already performs DNA analysis on anthrax-causing bacteria that are dead.

Jackson's work this year unearthed fresh evidence that dozens of people in a Siberian town were killed in 1979, not by natural anthrax, but by a release of multiple strains of anthrax bacteria from a Soviet lab.

LANL director John Browne will make the final decision on the new lab after environmental studies are completed early next year.

Feds Eye Secret Project At LANL

12/2/98

BY IAN HOFFMAN
Journal Staff Report

A federal nuclear-safety agency is raising safety concerns about a new, top-secret project at Los Alamos National Laboratory.

The nature of the project is, of course, a mystery to anyone without a top-level security clearance and a "need to know."

Whatever the work is, the Defense Nuclear Facilities Safety Board was concerned enough to demand a full report on precautions for safety and health.

The five-member safety board is an independent overseer of U.S. Department of Energy nuclear activities, including nuclear-weapons research at Los Alamos lab.

In a Nov. 17 letter, board chairman John T. Conway notified Vic Reis, the Assistant Secretary of Energy for Defense Programs, that the board is tracking DOE efforts "to startup certain classified activities" at LANL.

Board staff members are concerned, Conway warned, that "because of inadequate planning, there may not be sufficient time or talent for effective reviews of safety prior to commencement of these startup activities."

DOE's Office of Defense Programs built and maintains the nation's roughly 9,000 nuclear warheads and bombs, as well as thousands more nuclear weapons held in reserve or in various stages of dismantlement. This work accounts for nearly 80 percent of LANL's \$1.3 billion-a-year budget.

The safety board requested that the DOE report within 30 days on justification for the new classified work, internal safety reviews and any related loosening of operating restrictions on nuclear facilities at LANL.

Los Alamos officials did not respond to queries about the nature of the work, where it is to be conducted and when. The Energy Department likewise had little to say.

"It's classified," said Al Stotts, a DOE spokesman in Albuquerque. "There's nothing more I can tell."

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Feds Eye Secret Project at LANL

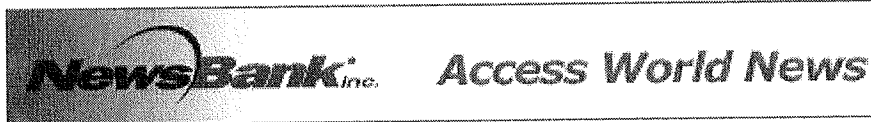
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you."

The secrecy riles activists such as the Los Alamos Study Group's Greg Mello, who called it "an end-run around public accountability."

"It is outrageous that the Department of Energy believes it can initi-

ate a totally secret new program at Los Alamos without revealing the nature of the program to the public," Mello said. "There is no justification for classifying the very existence of a project that could harm employees, the environment or the public."



Paper: Albuquerque Tribune, The (NM)

Title: Activists want to know nature of secret Los Alamos project

Date: December 3, 1998

LOS ALAMOS -- A classified project at Los Alamos National Laboratory has drawn the attention of an independent safety board that is concerned inadequate planning could lead to problems.

The nature of the project is a mystery to anyone without a top-level security clearance and a "need to know."

The Defense Nuclear Facilities Safety Board has demanded a full report on project precautions for safety and health. The five-member board oversees U.S. Department of Energy nuclear activities, including nuclear-weapons research at Los Alamos.

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The safety board requested that the DOE report within 30 days on justification for the new classified work, internal safety reviews and any related loosening of operating restrictions on nuclear facilities at LANL.

"Whenever we start up a new project, there has to be a comprehensive safety review," said lab spokesman Jim Danneskiold. "We provide an extensive set of documents to the DOE."

Danneskiold would not comment on details of the project.

"It's classified," said Al Stotts, a DOE spokesman in Albuquerque. "There's nothing more I can tell you."

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Author: THE ASSOCIATED PRESS

Section: Local News

Page: A2

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Fault Ups Odds For Replacing Building

12-9-98

Government Spent Millions on Repairs

BY IAN HOFFMAN
Journal Staff Writer

An earthquake fault at Los Alamos National Laboratory is boosting odds the federal government will seek to replace a major nuclear-weapons research building in 10 or 15 years — after spending over \$200 million renovating it.

Government weapons managers say they probably won't decide on pursuit of a new weapons-research lab at LANL for at least a year.

But the decision is likely to revive debate over precisely what U.S. Department of Energy scientists require in a post-Cold War era of declining nuclear arsenals and tepid interest in nuclear power.

"To do all the missions we've got, we need this facility space," said Bruce Matthews, director of LANL's Nuclear Materials Technology division.

Nuclear disarmament activists predict a repeat of 1990, when Congress scuttled the lab's six-year bid for a new, \$350 million Special Nuclear Materials Laboratory.

"There will be a regional outcry if Los Alamos attempts again to push its plutonium agenda down the throats of people in northern New Mexico," said Greg Mello, head of the Santa Fe-based Los Alamos Study Group.

Geologists unearthed a new factor in this debate last spring. In a recently released

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Fault Ups Odds for Replacing Building

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report, they revealed that volcanic rock beneath the Chemistry and Metallurgical Research Building has shifted vertically by as much as 8 feet over the last million years or so.

The fault they discovered is actually two small, side-by-side faults, most likely the final southwest fingers of the Rendija Canyon fault that cuts south across Los Alamos town. Its last earthquake is thought to have been at least 8,000 years ago.

The Rendija fault is a seismic hinge of sorts for the Rio Grande Rift, the scene of tectonic stretching that runs from Colorado south into Mexico. The rift is where North America is slowly tearing itself in two.

Scientists can't say whether or when the fault under the CMR building will slip again. Yet they see a rather slim likelihood — roughly one chance in 10,000 or more years — that the fault will crack open the 46-year-old building and release dangerous plutonium. They worry more about earthquakes shaking the building horizontally, a kind of seismic activity that is 20 times more likely.

Discovery of the fault nonetheless adds to CMR's already sizable troubles meeting modern safety standards for handling bomb quantities of plutonium, a speck of which

can cause cancer if inhaled.

"I think it's clear neither the laboratory nor the DOE would build a nuclear facility where the CMR is today," said Larry Goen, a LANL structural engineer in charge of assessing seismic threats to lab buildings.

Built in the early 1950s, the 550,000-square foot CMR building is the lab's most massive structure, a fortress-like monument to the Cold War arms race.

Inside CMR, scientists run chemical and physical tests on plutonium and other radioactive materials. No other secure government facility in the country can perform such analyses, scientists say. Most of CMR's work feeds into the nuclear-weapons program. Researchers there also look for ways to manage and clean up the wastes of weapons production.

"I've got things in there I really can't do anywhere else," said Corey Cruz, nuclear programs director for the U.S. Department of Energy's Albuquerque office that oversees LANL.

But the CMR building is far outdated and not built to withstand earthquakes. And the U.S. Department of Energy is only now grappling with seismic threats to its older nuclear facilities.

Geologists are still sizing up threats to the rest of Technical Area 3, the heart of the lab.

"This issue in the (nuclear) reac-

tor industry was a killer. It literally sank whole reactor sites," said Jeffrey Kimball, a former Nuclear Regulatory Commission seismologist now working for the Energy Department.

Until two years ago, lab and government managers figured a major renovation would cure CMR's problems and provide another 25 years of safe operations. The renovations ran \$15 million over budget and were halted. Work on a smaller scale has started up again, with a cap of \$225 million and a focus on essential safety upgrades, such as a new fire-detection system, to keep the CMR building operating until at least 2010.

The discovery of the fault raises the new issue of a ground rupture that would be vastly more expensive to defeat.

Lab managers are reducing the danger of a plutonium release in other ways: They removed from CMR over 70,000 pounds of combustible materials like wooden tables and old paperwork. They dropped by 60 percent the total amount of plutonium allowed in the building. And researchers soon will keep plutonium they are not immediately using inside fireproof cans.

"There are a number of changes in the works where we're comfortable with operations at CMR," said LANL's Matthews.

Still, the existence of the fault "makes it much less likely we would

upgrade CMR" for long-term operation, said the DOE's Cruz.

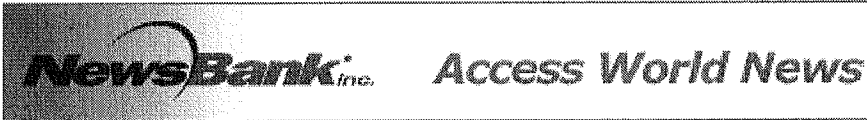
External safety regulators with the Defense Nuclear Facilities Board already are hinting to the DOE and the lab that they should consider building a new nuclear facility.

Said safety board chairman Jo T. Conway: "If you're going to have a need for a facility for an extended period of time and have a question of whether to modify an existing building that's 40 years old, my preference would always be to design and build a new building for your needs."

Energy officials still will evaluate renovating CMR or doing without such a facility entirely as alternatives. And it is unclear whether Congress will be receptive to funding a new nuclear-weapons research facility.

Lawmakers cut almost two thirds of DOE's funding requests for work on nuclear facilities at LANL this year.

"A new facility for plutonium is even less needed than it was in 1990, when it was rejected by the region and Congress," said Mello of the Los Alamos Study Group. "We will fight them in the courts. We will fight them on the highways. It's a recipe for regional conflict."



Paper: Santa Fe New Mexican, The (NM)

Title: Local

Date: December 11, 1998

Secretary of Energy Bill Richardson is expected to make a decision before Christmas that could be either a big gift or major blow for a multibillion-dollar project employing hundreds of people at Los Alamos National Laboratory and its contractors.

Richardson's decision is how and where the United States should produce tritium a radioactive isotope of hydrogen which is used to increase the explosive power of nuclear weapons.

Several sites around the country are intensely lobbying for the accelerator design project. While LANL is not a contender as a production site, the lab has been working for several years on a design for an accelerator to produce the radioactive gas. LANL officials say the accelerator would be 100 times more powerful than any other in the United States. It would be located in the Savannah River nuclear plant in Aiken, S.C., and not completed at least until 2011.

Since 1995, when then-Secretary of Energy Hazel O'Leary put the accelerator on the short list of options for tritium production, the lab's budget for the project has been steadily climbing: \$40 million in 1996, \$130 million in 1997 and \$200 million in 1998.

More than 500 people in Northern New Mexico are working on the accelerator project at either the lab or its two contractors, Burns and Roe Enterprises, Inc. and General Atomics, said Paul Lisowski, project director at LANL.

But the entire accelerator project could be scrapped if Richardson decides to go with another option to produce tritium at one of two commercial nuclear reactors run by the Tennessee Valley Authority. Several observers said that due to costs involved, Richardson is leaning toward the reactor option.

After Richardson toured the Savannah River site earlier this month the Savannah Morning News wrote in an editorial that the odds South Carolina would become the tritium-production site "appear to be eroding." And an arms-control activist who attended a briefing with Richardson in Washington last week said he came away with the clear impression that the accelerator option was off the table.

"I have a hard time believing (Richardson) is going to go with the accelerator at this point," said Brad Morse, Washington, D.C., representative of the Alliance for Nuclear Accountability, a coalition of 30 arms control and anti-nuclear groups. "It's just too expensive."

The U.S. Department of Energy says it needs a new source of tritium because the gas, unlike the other components of nuclear weapons, decays rapidly. Each year 5.5 percent of the nation's supply has to be replaced. Since the late 1980s the United States has replaced tritium in nuclear warheads by capturing it from old weapons that were being dismantled.

Meanwhile, arms-control groups argue that the United States can continue recycling tritium from old weapons and that the various tritium projects that have reaped the benefits of DOE largess are nothing more than nuclear pork barrels.

"The DOE has a history of saying there is a tritium supply problem, and later finding out that the need for tritium has been overblown," said Greg Mello of the **Los Alamos Study Group**. "The tritium project is pure pork."

During a telephone interview this week, Lisowski, who has spent recent weeks in Washington, refused to speculate on the pending decision, saying only that he believes Richardson "won't make the decision on tritium on cost alone.

But Lisowski criticized a report by the Congressional Budget Office that estimated the total costs for the accelerator would approach \$6 billion, compared to \$1.06 billion for the department to buy tritium from the commercial Watts Bar reactor in Tennessee or \$2.3 billion to complete and produce tritium at a reactor in Alabama.

Lisowski said the budget report padded the costs of the accelerator project to favor the interests of East Coast senators who commissioned it and "to present us in the worst possible light." By Lisowski's own estimate, the accelerator would cost \$2.8 billion to build and \$100 million per year in operating costs.

Lisowski also questioned whether a commercial nuclear reactor could successfully produce tritium. The United States last made tritium in a special defense reactor at the Savannah River site. The reactor was plagued with environmental problems, including tritium spills into the Savannah River, according to the Savannah Morning News. The reactor broke down in 1988 and is now on the list of federally funded contaminated sites needing cleanup. Lisowski argued that the accelerator option is cleaner and points to a positive review of the accelerator project by the JASONS, a group of academic defense advisers.

Activists aren't alone in opposing new tritium production. In a 1996 editorial in Science magazine, former LANL Director Harold M. Agnew labeled DOE's plans to spend millions of dollars producing new tritium "the nuclear fleecing of America," and argued that the United States could avoid multibillion-dollar projects by purchasing tritium from Canada, Russia or France.

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Author: BARBARA FERRY

Section: Local

Page: B-1

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Won't Make

Enough Nuke

Triggers

12/2/98

BY IAN HOFEMAN
Journal Staff Writer

Even with \$1.1 billion to work with, U.S. nuclear weaponers won't be making enough plutonium triggers to insure the nation's arsenal forever against possible breakdown, a new congressional report found.

So far, however, U.S. Department of Energy weapons scientists haven't seen the need for a larger and vastly more expensive weapons manufacturing plant such as the government operated during the Cold War.

Some Pentagon officials worry small-scale production of plutonium triggers at Los Alamos National Laboratory might not be enough to preserve the nuclear stockpile against failure, Congressional investigators with General Accounting Office say in a recent report.

Yet a multibillion-dollar research program of experimental machines, non-nuclear explosions and the world's most powerful supercomputers has not shown such a breakdown is imminent.

Scientists remain confident the grapefruit-sized plutonium triggers — the tiny A-bombs at the heart of modern thermonuclear weapons — will work as designed for at least 30 years and perhaps longer.

"We don't have any reason to believe through measured evidence that these weapons components are going to fall apart," said Dana Christensen, a chemical engineer and deputy director of the Nuclear Materials Technology Division at LANL.

"But these materials are live materials. They're radioactive. So we know at some point they will (fall apart)," Christensen said.

The GAO report exposes divisions over caretaking of U.S. nuclear weapons between the civilian agency that builds them and some of the military officials responsible for the nation's nuclear deterrent.

The Energy Department stopped making its so-called "war reserve" plutonium triggers, or pits, at the Rocky Flats plant near Denver in 1989. Some defense officials would like to see a plant nearly as large operating again as soon as possible, the GAO report stated.

Original plans called for Los

Report: U.S. Won't Make Enough Nuke Triggers

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Alamos in 2005 to start making as many as 50 war-reserve pits a year. But the Energy Department since has scaled those plans back, to 20 pits a year by 2007.

A team at Los Alamos has so far fashioned two demonstration pits for the W88 warhead, one of two nuclear tips on U.S. submarine-launched missiles. Building the first war-reserve pit is slated for 2001. These pits must be certified to highly precise specifications — "diamond stamped," in weapons lingo.

"Our job is not to put in a major production line but to re-establish the capability," Christensen said

Friday. "We've demonstrated we can cast and machine very close to war reserve specification."

The Energy Department is considering a plan to build a much larger plutonium-pit factory, able to turn out 150-500 pits a year, at either its Pantex plant near Amarillo or its Savannah River Site near Aiken, S.C. No cost estimates are available for such a factory, but they likely will run to several billion dollars.

Aiken is the hometown of Sen. Strom Thurmond, R-S.C., chairman of the Senate Armed Services Committee, who requested the GAO study of pit manufacturing.

"There's nothing wrong with the pits we have," said Greg Mello, a

Santa Fe disarmament activist. The GAO report "is nothing more than Strom Thurmond trying to get a bigger billion-dollar program for Savannah River."

The GAO report found that some Pentagon officials prefer building the factory now but acknowledge they don't know what its production level should be without further research by Energy Department scientists.

The DOE plans are awaiting research primarily on the shelf life of plutonium pits and high explosives, as well as surrounding components whose nature is classified, the GAO report said.

It is also unclear what number of pits might be needed. The U.S.

nuclear arsenal, roughly 9,000 fielded weapons, could be reduced by half or more through treaty negotiations.

To account for those uncertainties, the Energy Department is engaged in a massive research program to detect and predict problems in aging nuclear weapons. At the same time, workers at Los Alamos are relearning the roughly 100 steps and processes to make war-reserve pits.

"My personal opinion is the (Energy) Department is hosting a very responsible program," Christensen said. "Those pieces of information are necessary to determine what the ultimate (pit manufacturing) capacity should be."