Desert Voices
The Newsletter of Nevada Desert Experience • Volume 14, Number 1 • January 2001

# Nuclear Abolitionists Pray at Los Alamos Nuclear Laboratory

*by Diana Winston*

From September 5-8, we held a retreat and vigil at Los Alamos National Laboratory (LANL). The retreat was organized by people from the Los Alamos Study Group, Mountain Cloud Zen Center (both in Santa Fe, NM) and the Buddhist Peace Fellowship (BPF). The retreat had originally been planned for May, but had to be rescheduled due to the fires in New Mexico.

We met at Ponderosa Pine Campground, pitched our tents, spent several hours organizing, as many of the details had not yet been worked out, and introduced ourselves. In a parking lot in the isolated nether-regions of the lab we were

*(See Winston, continued on page 6)*

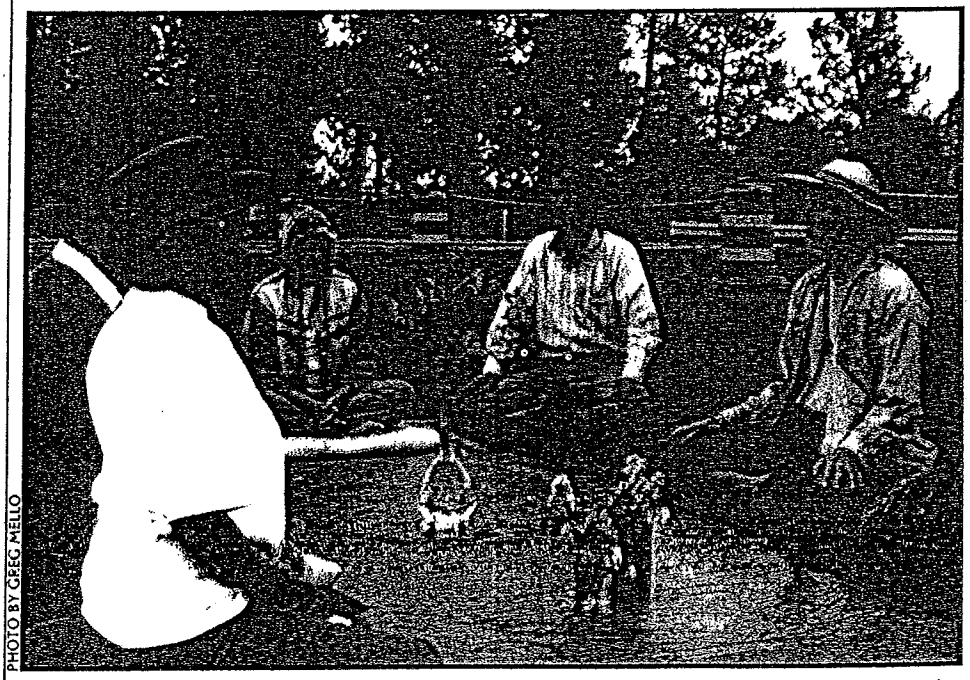

PHOTO BY GREG MELLO

Some of the retreatants from California & New Mexico meditate in the parking lot designated for a week of quiet abolitionist activity at Los Alamos Lab.

*(Winston, continued from page 1)*

to set up our "zendo" which consisted of a giant blue tarp and many brown zabutons and zafus (pads to sit upon while meditating). Very few of the 12,000 workers would get to see us; nevertheless, we persevered. Our only shade in the ninety degree heat would be from the shadows emitted from our carefully positioned RV, which we rented when the lab refused us access to their toilets. The RV was fondly dubbed, the Protestmobile. On the first morning Greg Mello, Director of the Los Alamos Study Group, gave us a tour around the lab, showing us where plutonium was stored, where the original bombs had been developed before they exploded over Hiroshima and Nagasaki, which pueblos had been destroyed to set up the lab, and where genetic research was being done.

The retreat had a beautiful low-key community feel where the twenty of us grew quite close. Many of us were from BPF , including Maylie Scott, Trena Cleland, Donald Rothberg, Kaz Tanahashi, Greg Mello, Sarah and Stefan Laeng-Gilliat. In addition, there were several Christians affiliated with the Center For Action & Contemplation (Albuquerque, NM), the Sisters of Loretto, and Nevada Desert Experience.

Three morning sits (meditation sessions) and breakfast were held at the campground. This was followed by meditations and services at the Lab. We took a break for lunch and a daily field trip, and resumed our sitting about 2:30 till 5:30. Later we returned to the campground for soup and an evening program. As this was an interfaith retreat, several people had never meditated before. So we combined sitting and walking meditation with dharma talks, a beautiful Christian prayer service with readings from Dorothy Day's autobiography, and powerful chanting led by Ed Rippy from Soka Gakkai International. Maylie's dharma talk had us inquire into "who" was meditating and performing this vigil. Donald talked on structural violence and why it's hard to respond to. One morning we did Christian meditation, on another, metta, on another, zazen.

One of the most striking pieces of our time was lunch when we ate at the cafeteria with the lab workers. Most of us felt it was an extremely odd experience in that we were eating in a setting much reminiscent of a college cafeteria, with thousands of workers all dressed in casual clothes, looking very much like anyone else. Yet there was something slightly off-- the fact that these people were either working directly on or in support of the machinery for weapons of mass destruction. As Kaz said, the suffering here is not obvious like at Auschwitz, it's too beautiful and cheerful here (incidentally, Oppenheimer chose Los Alamos because he liked to go hiking in the area). Instead you have to interpret it to realize there is just as much if not more suffering (or capacity for it). There were several discussions among our group around the delusion needed to maintain the facade and where was morality in all of this? How does one live with the disconnect between one's values and one's work? Many of us sat with lab workers during lunch, two to four at a table, some of us debating our political agenda, others listening solemnly to the "other's" point of view.

**Did our presence make a difference at all?** For LANL workers, retreatants, the nuclear age, or socially engaged Buddhism in general?

**FOR THE LAB WORKERS:** It is hard to say. They were definitely aware of our presence through their intranet and the obvious wandering hippies with large sun hats in the cafeteria. They were somewhat confused by us as we definitely didn't fit the classical mode of protester-- we weren't shouting, we didn't have signs, no police were detaining us. But our sitting site was very isolated, far from the majority of workers. I often wondered if we were having any impact at all. On the first morning, however, a woman, clearly a lab worker, walked into our parking lot, and stood in front of each of us and bowed. It was an extremely poignant moment for all of us. Later she came back and offered a bouquet of flowers which we later offered to the earth in a healing prayer.

**FOR THE INDIVIDUALS PARTICIPATING:** Yes. Several of us felt we had learned a lot both about the issues and about what it meant to sit in meditation and solidarity for our be-



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liefs, even if at times it was humiliating. I personally had insight into the ways in which my inner struggles mirror those of the people who create nuclear weapons. We are all fearful and are seeking ways to make the world seem under our control. We all want power and fear powerlessness. I do too. One group member said when she was sitting on the tarmac in the beating-down sun, as embarrassing as it was, in that moment there was nothing else she wished she could be doing. Sitting there represented the perfect synthesis of her dharma practice and her wish for peace.

**FOR EACH OTHER:** Unquestionably yes. This was a tremendous time of community building and strengthening of ties, particularly among ourselves as a socially engaged Buddhist community and among the interfaith groups. Everyone agreed that we wanted to hold the event again next year, and many people volunteered to work on it. We worked together, strategized together, spent hours in logistical debates, painted together, talked about the deeper issues together, and grew in community together.

**FOR SOCIALLY ENGAGED BUDDHISM:** Definitely. The retreat represented a new form of Buddhist/interfaith protest where we practiced and sat for our beliefs. I think it is certainly worth replicating as our tradition develops, and can be a powerful form of protest for other issues, and an offering to the activist community in general. This experiment in form and in practice is clearly one extremely valuable expression of socially engaged Buddhism.

**FOR THE FUTURE OF NUCLEARISM?** Well it certainly was a way to make us feel like a tiny pebble in a vast ocean, but this is where my trust in the dharma is vast. Here I surrender to the mystery and say, who knows? The dharma is mysterious and as we used as a refrain many times on this retreat: sometimes we forget that the power of love and compassion is stronger than the power of violence and destruction. The earth was happy we were there. This much we knew.

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*Diana Winston is part of the Buddhist Peace Fellowship.*

*[EDITOR'S NOTE: This retreat gave birth to a desire for regular, monthly vigils & meditation at Los Alamos National Laboratory (LANL). The vigils are now on the last Thursday of each month (except December). LANL failed to give permission for such an activity for the October prayers and employees were quite upset when three people stood in front of the Lab entrance sign holding an NDE banner proclaiming "Abolish Nuclear Weapons". Upon contact with Lab Security, the vigil ceased and was voluntarily moved off of LANL's property for the day. In November, permission was obtained from LANL for prayer, leafletting, and vigilling on LANL's property. Contact the Los Alamos Study Group to get involved with this faith-based resistance: (505) 982-7747.]*

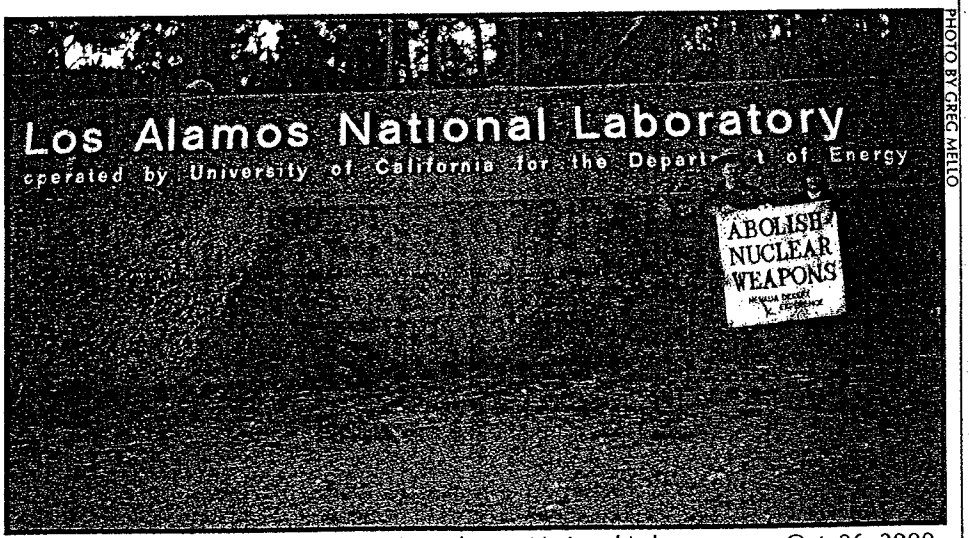



PHOTO BY GREG MELLO

First monthly vigil at the entrance to Los Alamos National Laboratory on Oct. 26, 2000. On left is Marcus Page of NDE, on right is Vilma Ruiz of Los Alamos Study Group.

# Sitting in the Dragon's Lair

## An Interfaith Retreat at Los Alamos National Laboratory

**by Trena Cleland and Diana Winston**

A large blue tarp lies on the grounds of Los Alamos National Laboratory. On it sit several rows of silent, unmoving figures, all wearing wide-brimmed sun hats and facing fire-scarred mountains. Three chimes of a meditation bell ring in counterpoint with the beep-beep-beep of a Caterpillar tractor up the street that is breaking ground for the world's largest computer.

Forty minutes pass and no one moves. The bell sounds again. The people stand up, bow to their cushions, and slowly walk together in a silent line around the blue tarp. Then they sit back down.

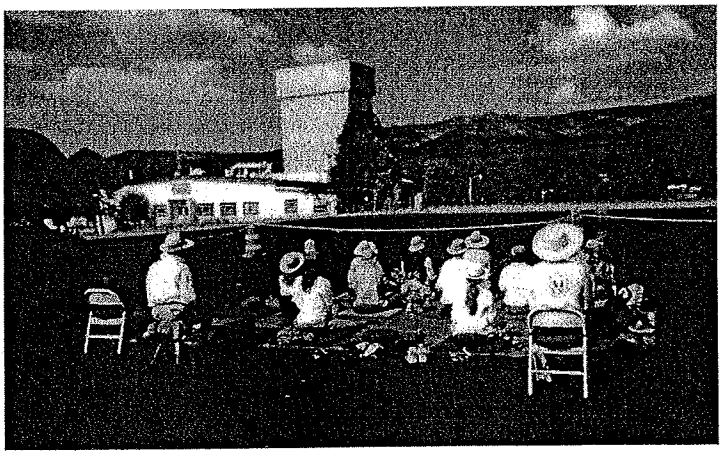
The two of us were among those sun-hatted meditators who traveled to New Mexico in September for a five-day interfaith witness and meditation retreat at the lab, the cornerstone of the nuclear weapons industry in the U.S. Most of us had participated in anti-nuclear marches and demonstrated at weapons facilities, but none of us had ever brought our spiritual practice directly "into the lair of the dragon." The brochure prepared by the retreat's organizers, the Los Alamos Study Group (LASG), promised an opportunity to do just that:

> We will sit and pray in solidarity with each other, with laboratory workers caught in a destructive system, with the surrounding communities and tribes, with generations born and yet to be born. In an age of cynicism and despair, caught between irresponsible power and the futile politics of blame, we will demonstrate another way. Each person's powerful presence—dignified, profoundly introspective, and deep—will have consequences that cannot be fully foreseen, affecting visible and invisible worlds.

The retreat was planned by former BPF board member Greg Mello and his colleague Vilma Ruiz, who run the LASG. BPF also helped organize the retreat. It was originally planned for May but had to be rescheduled to September due to the fires that ravaged the Los Alamos area.

Loose pre-planning made the event frustrating at times but also magically spontaneous. The low attendance (about 20 core participants) was somewhat disappointing, but it also meant that the retreat had a beautiful, low-key, community feel, and participants grew quite close. Many of us were from California, almost all BPF members, while other Buddhists came from sanghas in New Mexico. We came from different traditions: Vipassana, Soka Gakkai, and a couple of flavors of Zen. There were a number of progressive Christians present, representing the Sisters of Loretto, the Nevada Desert Experience (which organizes witnesses at the Nevada nuclear test site), and the Center for Contemplation and Action in Albuquerque.

Our typical day consisted of an early-morning sitting and breakfast at our campground at Bandelier National Monument, after which we shuttled to our "zendo" at the lab for more sitting and walking meditation. We took a break for lunch and resumed sitting for two or three hours in the afternoon. At the end of the day, some of us took showers at the local public pool. Eventually, we all gathered back at the campground for a soup supper—provided daily by the supportive members of the Mountain Cloud Zen Center in Santa Fe—and an informal evening program.



**The Parking Lot Zendo at Los Alamos**

Our hearts sank when we first saw the area assigned to us by lab officials for our meditation retreat: a newly blacktopped parking lot next to a uranium handling building—blazing hot, unshaded, and completely unnatural. Back in May, when our retreat was supposed to happen, the place was still a grassy knoll. By the time September rolled around, it had been paved over and turned into a parking lot. (There's a song in there somewhere.)

The lot was located at the margin of the 43-acre lab

property, separated from the road by lines of parked cars and out of sight of most of the 12,000 workers. The proportions of the place began to sink in. We were a tiny group with an enormous project: to take on the nuclear weapons industry. Our "zendo" consisted of a giant blue tarp topped with many brown zabutons and zafus, surrounded by ominous "No Trespassing: Nuclear Facility" signs and safety cones. Nearby, a pleasant lab guard kept tabs on us—while enjoying the air conditioning generated by his idling vehicle. This had to have been the world's most uneventful security gig.

Over time, we came to feel empathy for this tortured patch of property that reflected the disrespect for nature demonstrated by the lab's existence. Our zendo was surrounded by buildings devoted to nuclear and biological weapons research and plutonium storage. Below the oily blacktop was the living, beating pulse of the earth. Sitting on it strengthened our witness more than sitting on a comfortable tree-shaded lawn might have.

**Our little train had a dignified air, but a couple of us couldn't help wondering whether we looked like nuts to the lab employees.**

The lab refused to provide toilet facilities and requested that we bring only one vehicle per day. So Greg and Vilma rented an RV—shuttle and toilet in one! The RV served us in another way by casting much-needed shade when carefully positioned next to our meditation tarp.

We shuttled back and forth from our campground and around town in this lumbering van, bouncing around among piles of zafus and zabutons, gallons of drinking water, backpacks, and straw hats.

This was a multifaceted retreat. We combined sitting and walking meditation with dharma talks, powerful chanting led by a participant who practices with Soka Gakkai International, and a beautiful Christian prayer service that included a water healing ceremony and readings from Dorothy Day's autobiography. Maylie Scott, a Zen priest and BPF board member, gave a dharma talk that had us inquire into "who" was participating in this vigil. Longtime BPF associate Donald Rothberg gave a talk on "Ten Reasons Why It's Difficult to Confront Structural Violence" (see page 34).

Our spiritual diversity raised inevitable questions about practice forms. One of the Christian participants was confused by the practice of bowing to zafus. Some of the Buddhists, at home with silence, had to accept that dialogue and social bonding are an important part of Christian peacemaking. So we improvised: one morning we did Christian prayer; another, *metta* (lovingkindness) meditation; another, zazen. At one point, artist Kaz Tanahashi led us in using paints and brushes to illustrate and describe our visions of the future. One night we held a Native American–style council to talk—with tears, laughter, and prayers—about our experience.

In our RV, nicknamed the "Protestmobile," Greg took us sightseeing around the Lab. He showed us where plutonium was stored, where the original bombs had been tested before they exploded over Hiroshima and Nagasaki, where pueblos had been destroyed to set up the lab, and where genetic research was being done. We drove through neighborhoods flattened by the recent fire, through charred remains of ranch houses that echoed a post-atomic Hiroshima.

A high (low?) point was a trip to the Bradbury Science Museum. There, we watched a videotape about the history of Los Alamos, learned about the beneficial effects of radiation, and "played" with interactive exhibits. ("Press here and watch a bomb go off!") Diana took the Plutonium Quiz and scored 60 percent correct. ("Is it worse to touch, swallow, or inhale plutonium?")

Each day at lunch time, we walked slowly in single file to the lab's main cafeteria, half a mile from our parking lot. Our little train had a dignified air, but a couple of us couldn't help wondering whether we looked like nuts to the lab employees. It was painful to admit they might dismiss entirely our mindful pilgrimage.

Los Alamos National Lab is technically a "campus" of the University of California, and it does have a college feel. The employees like to think of themselves as academics, computer nerds, and pure scientists; although 80 percent of the work of the lab involves the design and manufacture of nuclear weapons, few employees perceive themselves to be "bomb-makers."

Nowhere was this collegelike ambiance more in evidence than in the company cafeteria. Since there is no dress code at LANL, shorts and tee-shirts prevailed. Some of the men had long hair and pierced ears. One had a copy of *Mother Jones* on his tray. There were about equal numbers of women and men. Although most employees were white, there were quite a few Asian Americans and Latinos (the latter seemed to be blue-collar workers), and a handful of African Americans. Most of the people were friendly and approachable.

On the one hand, we found this comforting; it broke down distinctions in our minds between "us" and "them." On the other hand, the apparent normalcy was chilling. There was a surreal sense of business-as-usual, while all around were the tools and materials of poison, fire, and death.

Our group pondered the level of delusion needed to maintain this facade of normalcy. How did people live with the disconnection between their values and their work?

One day at lunch, two of us approached a woman in her forties, Tracy, and asked if we could join her. She was willing, and immediately began to talk nonstop about her life, her dog, her friends, her book club, the restau-

rants and shops we should visit, the aftermath of the Los Alamos fire—everything but her work as a computer programmer. Efforts to steer the conversation to her lab work and our retreat were mostly unsuccessful.

However, we did learn that Tracy and her coworkers feel defensive when anti-nuclear protesters come with their signs and chants; the employees feel slandered and unfairly attacked. She and her friends consider themselves liberal, and they believe strongly in the freedoms that U.S. citizens have (for example, to demonstrate). They see their work at the lab as a way to protect these freedoms. Tracy expressed the opinion that our group might fruitfully work on something "more important," like violence in children's TV.

Listening to a stranger like Tracy chat about her personal life—"bearing witness" to her experience and her perspective—is a different kind of activism than most of us are used to. Our challenge was to give her our time and attention, not a piece of our minds. But of course, thoughts interrupted. Is this activism? Wouldn't our time be better spent with that other employee sitting over there? Maybe he'd be willing to talk about the Real Issues. Maybe we should excuse ourselves and go over...No, come back to the present. Be here with this human being, this conversation, this moment.

After a few minutes, Tracy waved a couple of fellow computer scientists over to our table. One of the men asked questions about Buddhist history and politics. He said, "I used to be idealistic. I was an antiwar protester back in the '60s. But now I think we need to be strong. Look at evolution; it's all about survival of the fittest."

Actually, current understanding of evolution suggests that it is not strength but creativity, flexibility, cooperation, and response to feedback that characterize survivability. We talked about this and about new-paradigm thinking, systems theory, and "emotional intelligence." Something must have resonated, because at the end of the meal, he asked us to recommend a good introductory book about Buddhism. (Our suggestion was Jack Kornfield's *A Path with Heart.*)

Greg Mello, the eloquent and respected director of the LASG, gave our group several excellent mini-teach-ins on the lab's history and culture. He said, "The primary function of nuclear weapons is in the mind. They are meant to detonate in the imagination. As such, they are in use all the time.

"They can't be used in the real world, but the threat of them, the thought of them, the fear of them, is what makes them so effective. Perception is everything. The lab's essential work is the construction of ideology."

Greg has good relations with people on the lab staff. His opinion is that the lab is quite weak and vulnerable, and that our presence was—well—disarming. "The best-kept secret of Los Alamos Lab is the mediocrity of its thinking," he said. According to Greg, the lab's right hand doesn't know what its left is doing, and the whole organization wobbles on a foundation of deception and incompetence.

Did our presence make a difference to the lab workers? It's hard to say. They were informed of our presence through a posting on their intranet, the in-house computer bulletin board. Those we talked to seemed somewhat confused by us, as we didn't fit the classical mode of protester—we weren't shouting, we didn't have signs, and no police were detaining us. And because our meditation site was very isolated, far from most of the workers, we often wondered whether we were having any impact at all.

On the first morning, however, one employee of the lab, ID badge hanging from her neck, drove up in her car, walked quickly over to where we were meditating, put her hands together and bowed deeply to us several times, and then was gone. It was a poignant moment. Her courage led us to think that there were probably others on the workforce, too timid to show their support, for whom our presence was significant. The next day she came back with another gift of encouragement: a bunch of wildflowers in a jar.

**"The primary function of nuclear weapons is in the mind. They are meant to detonate in the imagination. As such, they are in use all the time."**

Did our presence make a difference to us as individuals participating? Yes. We learned a lot not only about nuclear issues but about what it means to sit in solidarity for our beliefs, even when it seems absurd to do so. We saw that both we and the people who create nuclear weapons fear that we lack power, and we all seek ways to control the world we live in.

One group member said that when she was sitting on the tarmac in the beating-down sun, as silly as it felt, in that moment there was nothing else she wished she could be doing. Sitting there represented the perfect synthesis of her dharma practice and her wish for peace.

Did our presence make a difference to each other? Yes, unquestionably. This was a tremendous time of community-building. We worked together, strategized together, spent hours in logistical debates, created art together, and talked about the deeper issues together. Everyone agreed that we wanted to hold a similar retreat again next year, and many people volunteered to help arrange it.

Did our presence make a difference to socially engaged Buddhism? Definitely. To sit in meditation for our beliefs is an unusual form of Buddhist/interfaith protest. It has real potential as a way to demonstrate our concerns about a variety of issues, and as an offering to the whole (primarily secular) activist community. We were required to bring our spiritual principles into every moment of the retreat, even when we were scoffing at the absurd museum dioramas or eat-

*(continued on page 37)*

percent of the U.S. population agreed that they would be safer if no country had nuclear weapons (1997). We can remember the potential of the present moment: the end of the Cold War and thus of most of the earlier rationales for nuclear weapons, and the UN support for a decade of nonviolence in this first decade of the new millennium. One scientist who has worked at Los Alamos since 1966 told me that most who work there would like to see nuclear weapons abolished—if they could feel safe without them.

**9. In this culture, Buddhist teachings often focus on the more personal rather than the structural sources of suffering.**

Often our concerns about structural violence are not supported by our spiritual communities. Even though Buddhists claim to be addressing suffering (or *dukkha*), there is typically an emphasis on *my* suffering rather than suffering as such. We need to make clearer the connections between structural violence and personal suffering. We also need to question the extent to which individualistic spiritual practice reinforces a sense of separate self. We can learn in this regard from our Christian and Jewish friends, especially from the prophetic tradition of concern for the "other" that passes from Isaiah through Jesus down to contemporaries like Abraham Joshua Heschel, Martin Luther King Jr., and liberation theologians.

**10. We tend to forget that love, wisdom, and nonduality are deeper than violence and denial.**

Being in the presence of entrenched structural violence certainly "tests" us. We may often think ourselves weak in comparison with the systems that we contest. We may feel isolated and forget the deeper love and wisdom that is at the heart of our beings.

This suggests the vital importance of both community and spiritual practice. We need to find refuge within the "beloved community." And we need to return to our own lived experiences of love and wisdom. Such continual access to spiritual nourishment is what sustains us for the long haul. In 1967, Martin Luther King Jr. said:

> Our only hope today lies in our ability to recapture the revolutionary spirit and go out into a sometimes hostile world declaring eternal hostility to poverty, racism, and militarism...This call for a world-wide fellowship that lifts neighborly concern beyond one's tribe, race, class and nation is in reality a call for an all-embracing and unconditional love for all human beings...When I speak of love...I am speaking of that force which all of the great religions have seen as the supreme unifying principle of life. Love is somehow the key that unlocks the door which leads to ultimate reality. ❖

*Donald Rothberg is on the faculty at Saybrook Graduate School, where he has developed a program in Socially Engaged Spirituality. He has written and taught widely on socially engaged Buddhism, and is the co-editor (with Sean Kelly) of* Ken Wilber in Dialogue: Conversations with Leading Transpersonal Thinkers. *He has been a mentor for BPF's BASE program since its inception in 1995.*

## Dragon's Lair, continued from page 33

ing cardboard-like cafeteria pizza. In this moment, are my actions contributing to peace and nonviolence? Am I patient? How is my equanimity? Am I mindful? Can I be awake in this moment? The sitting supported our inquiry.

Did our presence make a difference to the future of the planet? Though we felt like tiny pebbles in a limitless ocean, our trust in the dharma is vast. Here we surrender to the mystery of the dharma and say, who knows? We must not forget that the power of love is stronger than the power of destruction. The earth benefited from our presence. This much we know.

P.S. It's worse to inhale plutonium. ❖

[Special thanks to participant Mark Pringle of Arcata, California, for his contributions.]

*Trena Cleland, a BPF board member, was part of a group that walked across the U.S. in 1981 to promote nuclear disarmament.*

*Diana Winston, associate director of the Buddhist Peace Fellowship, is a regular contributor to* Turning Wheel *and other Buddhist publications.*

### Some Resources on Structural Violence and Atomic Weapons

**On structural violence:**

Johan Galtung, *Peace by Peaceful Means* (1996)

Donald Rothberg (ed.), *Responding to Violence* (special issue of the journal *ReVision*, Fall 1997)

**On atomic weapons:**

Gar Alperovitz, *The Decision to Use the Atomic Bomb and the Architecture of an American Myth* (1995)

Praful Bidwai and Achin Vanaik, *New Nukes: India, Pakistan and Global Nuclear Disarmament* (2000)

Richard Rhodes, *Dark Sun: The Making of the Hydrogen Bomb* (1995)

Jonathan Schell, *The Gift of Time: The Case for Abolishing Nuclear Weapons* (1998)

Steve Schwartz, *Atomic Audit: The Costs and Consequences of U.S. Nuclear Weapons Since 1940* (1998)

**Web sites:**

Los Alamos Study Group: *www.lasg.org*

Alliance for Nuclear Accountability: *www.ananuclear.org*

Natural Resources Defense Council: *www.nrdc.org*

# Local officials react to Bush's energy secretary appointment

By KRISTEN DAVENPORT
The New Mexican

#1 1/3/01

President-elect George W. Bush's appointment of U.S. Sen. Spencer Abraham as Secretary of Energy could have a substantial impact on the future of New Mexico's two weapons laboratories, local officials said Tuesday.

Or, as some believe, having Abraham, a conservative Republican, at the helm won't make a bit of difference in the way the labs are managed.

The Department of Energy owns the nation's nuclear-weapons laboratories, including Los Alamos National Laboratory and Sandia National Laboratories in Albuquerque. However, a semiautonomous agency called the National Nuclear Security Administration has taken a large chunk of the DOE's responsibilities over the labs.

"I am pleased to endorse and pledge to support the candidacy of (Abraham) to be the new Secretary of Energy," Sen. Pete Domenici, R-N.M., said in a news release. "This is good news for New Mexico as Senator Abraham and his staff have worked with me and my staff on a variety of issues, including energy issues, during his tenure in the Senate."

But others are skeptical anything will change under Abraham's rule.

"Whoever they appoint is sort of irrelevant," said Chris Mechels, a Los Alamos National Laboratory employee-turned-critic. "As we found out, the real Secretary of Energy is Pete Domenici. If the DOE wants to cut the budget of the lab's pet project, Pete puts it back in. The people really running the labs are Pete and (Gen.) John Gordon."

Gordon, who was hand-picked by Domenici, heads the National Nuclear Security Administration and cannot be removed from his job for three years.

If approved for the job, Abraham would succeeds former New Mexico Rep. Bill Richardson.

Some critics say Abraham has too little experience at public life — and energy issues — to be secretary of energy. Abraham served as chief of staff for vice president Dan Quayle and served one term as a U.S. senator from Michigan until being ousted by a Democrat in November's elections.

On his Web site, Abraham doesn't list national security, weapons or other energy problems as his top issues, instead offering Internet seekers his views on a date-rape drug, education, food safety and health care. However, he was active in high-tech issues during his term in the Senate, and several people suggested that played a role in Bush's decision to appoint him.

"This is an unexpected choice, but certainly Senator Abraham is well liked by members of both sides of the aisle," said Sen. Jeff Bingaman, D-N.M.

The Senate will have to approve Abraham's appointment. Bingaman is ranking Democrat on the Senate Energy and Natural Resources Committee. Domenici also sits on that committee.

Greg Mello, director of the Los Alamos Study Group, a lab watchdog, said it's possible that Abraham might do a great job. However, he said, managing the labs is such a hard job that Bush should appoint someone with a backbone who won't bow to lab managers' wishes.

"As secretary of energy, you rarely have any idea what part of the nuclear complex is going to erupt in scandal and don't have any control over it," Mello said.

Richardson, who plans to return to New Mexico for a "breather," issued a statement Tuesday, saying he believes Abraham's appointment is a "positive development."

"I have worked with him in the past on immigration issues and have always admired his efforts in that arena," Richardson said through a spokesman.

# Bush DOE Selection Criticized

■ *Watchdogs say Spencer Abraham lacks experience in dealing with nuclear issues*

1/30/01
AJ

By Jennifer McKee
*Journal Staff Writer*

President-elect George W. Bush tapped Spencer Abraham, a one-term Michigan senator, to head the Department of Energy on Tuesday, drawing criticism from New Mexico nuclear watchdogs who zeroed in on Abraham's lack of nuclear experience.

"Putting someone with no apparent experience in charge of the Department of Energy ensures that the career bureaucrats, the nukemeisters and strangeloves will be running the show," said Greg Mello of the Los Alamos Study Group, a Santa Fe group that promotes nuclear arms reduction. "They'll be writing the agenda."

If the Senate confirms the nomination, Abraham will replace current DOE Secretary Bill Richardson, an eight-term New Mexico congressman and former United Nations ambassador.

Richardson likewise came to the DOE with little experience in nuclear issues. But Mello maintained that Richardson had more political savvy than Abraham and attempted to "bring the national labs back under control."

"Richardson was a pretty good

*See* **WATCHDOGS** *on* **PAGE 3**



**ABRAHAM: Former Michigan Republican Party leader**

# Watchdogs Criticize DOE Appointee

*from* **PAGE 1**

secretary," he said. "He had a lot of political skills and he needed all of them just to survive."

Abraham, a Lansing, Mich., native, was an attorney and Republican Party leader before he ran for the Senate in 1994. He served one term and was defeated by Democrat Debbie Stabenow in November's election. Abraham also served as chairman of the Michigan Republican Party, co-chairman of the National Republican Congressional Committee and was former Vice President Dan Quayle's deputy chief of staff.

In the Senate, Abraham sat on the Budget, Small Business, Judiciary and Commerce committees, none of which have direct oversight over the Department of Energy. The Commerce Committee, however, has some power over managerial decisions within the DOE.

Abraham also co-sponsored several measures to dismantle the Department of Energy.

New Mexico's Democratic Sen. Jeff Bingaman called the nomination "an unexpected choice" in a statement Tuesday but went on to wish Abraham well and promised to "do what I can to help him succeed."

*"George Bush's handlers have an agenda and this appointment expresses that. What can we say?"*

GREG MELLO, LOS ALAMOS STUDY GROUP

New Mexico's Republican Sen. Pete Domenici, chairman of the Senate Energy and Water Development Appropriations Subcommittee, which funds the DOE, welcomed Abraham.

"I believe New Mexicans will have a special friend in Sen. Abraham," Domenici said Tuesday in a prepared statement. Domenici also promised to "endorse and support" Abraham's candidacy.

"He has served ably on my Budget Committee for the last six years and I am confident of his abilities to be a good secretary," Domenici said in his statement.

Jay Coghlan, founder of Nuclear Watch of New Mexico in Santa Fe, said Abraham's ample experience in the Republican Party and his relatively light past in energy matters suggests Abraham's nomination is purely political.

"He essentially has zero experience," Coghlan said. "What kind of appointment is this? At this particular time, which is quite sensitive with respect to where the world is going with nuclear matters, it just doesn't seem right that there should be some inexperienced person as secretary."

Mello said he feared Abraham would weaken environmental controls at the DOE. Most importantly, he said, Abraham doesn't appear to have the background necessary to fix some well-publicized security and safety problems in the department's facilities, including Los Alamos National Laboratory.

"George Bush's handlers have an agenda and this appointment expresses that," he said. "What can we say?"

Representatives of Abraham did not return phone calls Tuesday.

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# N.M. reaction to new energy czar is mixed

**The Associated Press**

LOS ALAMOS -- Local officials say the appointment of Sen. Spencer Abraham as secretary of the U.S. Department of Energy could have a substantial impact on the future of New Mexico's two weapons laboratories.

Or, as others believe, his appointment won't make a bit of difference in how the labs are managed.

Abraham, a conservative Republican from Michigan, was picked Tuesday by President-elect George W. Bush.

"Whoever they appoint is sort of irrelevant," said Chris Mechels, a Los Alamos National Laboratory employee-turned-critic. "As we found out, the real Secretary of Energy is (Sen.) Pete Domenici. If the DOE wants to cut the budget of the lab's pet project, Pete puts it back in."

Domenici, an Albuquerque Republican, said Tuesday he endorses Abraham's appointment. The senator said he spoke with Abraham, who said he knows he's inheriting a difficult job -- ranging from the energy crisis to dealing with security issues at the weapons labs.

If approved for the job, Abraham would succeed former New Mexico Congressman Bill Richardson as the nation's energy chief.

Some critics say Abraham doesn't have enough experience to be secretary of energy.

Abraham served as chief of staff for vice president Dan Quayle and served one term in the Senate until being ousted by a Democrat in November's elections.

Abraham was active in high-tech issues during his term in the Senate, and several people suggested that played a role in Bush's decision to appoint him.

"This is an unexpected choice, but certainly Senator Abraham is well liked by members of both sides of the aisle," said Sen. Jeff Bingaman, a Silver City Democrat. "The job of Energy Secretary is enormously challenging, dealing with matters as diverse as cleaning up in the aftermath of the Cold War to electricity deregulation."

Bingaman is ranking Democrat on the Senate Energy and Natural Resources Committee, which will hold hearings to quiz Abraham before his appointment can be approved by the Senate.

Greg Mello, director of the Los Alamos Study Group, a lab watchdog, said managing the labs is such a hard job that Bush should appoint someone with a backbone who won't bow to lab managers' wishes.

"Because (Abraham) doesn't have much background (in nuclear-weapons or other

1/4/01

energy issues), it might be hard for him to exert managerial control over the labs," Mello said. "It's a very hard job, and it's not for the faint of heart.

"As secretary of energy, you rarely have any idea what part of the nuclear complex is going to erupt in scandal and don't have any control over it."

Abraham had tried to abolish the Department of Energy. He cosponsored legislation to eliminate the agency in 1999, when it was mired in the controversy over security problems at Los Alamos Lab.

And in 1996, he was part of a small group of Senate Republicans who cosponsored legislation to close the departments of Energy, Commerce, and Housing and Urban Development and privatize or assign to other departments the functions worth preserving.

Both attempts died in committee.

Officials at Los Alamos Lab had no comment on the choice of Abraham, and a spokesman for the University of California, which manages Los Alamos Lab, said the university will work with anyone picked for the job.

Richardson, who plans to return to New Mexico, issued a statement Tuesday saying he believes Abraham's appointment is a "positive development."

# GAO: Nuke Plan Needs Overhaul

1/5/01 AJ

## Confusion in DOE Leadership Reported

By Jennifer McKee
*Journal Staff Writer*

Management malfunctions and blunder-filled budgets within the Department of Energy plague the country's nuclear weapons stockpile, according to a federal report released Thursday.

The report, conducted by the General Accounting Office at the request of the congressional Subcommittee on Energy and Water Development, examined the department's Stockpile Stewardship Program — the eight-year-old policy of maintaining aging nuclear weapons as opposed to building and testing new ones.

The report examined planning, budgets and management of the program and concluded that all are in need of overhaul.

"Several studies have found that the Office of Defense Programs (within the DOE) has a dysfunctional organization with unclear lines of authority that lead to a lack of accountability," the report reads. "The program remains fragmented at the headquarters level and the division of roles and responsibilities between headquarters and the field is unclear."

The department's Office of Defense Programs oversees the nation's nuclear weapons complex, including Los Alamos National Laboratory and Sandia National Laboratory in Albuquerque. Management of part of the complex is divided into eight private contractors, including, for example, the University of California which manages Los Alamos. But those contractors don't all answer to the same DOE higher-ups.

When auditors checked in October, for example, three of the contractors reported to DOE offices other than the Office of Defense Programs.

In addition, the report found, almost 65 percent of management jobs are vacant within the Office of Defense Programs — a situation that has sidelined needed decisions on stockpile stewardship for years.

The department also has numerous field offices, including a large one in Albuquerque. But just which offices, among the nest of authority in the complex, control what is unclear.

"One key problem ... is the existence of 'two headquarters,'" the report reads. "One in the Office of Defense Programs (in Washington, D.C.) and one in the Albuquerque Operations Office. This situation exists because clearly defined roles and responsibilities are lacking."

The report goes on to say that "officials in both offices noted uncertainty about what managers are authorized to do."

Illustrating the confusion, the Office of Defense Programs has developed more than 70 different plans for the Stockpile Stewardship Program, according to the report, but not a single one is complete.

The report offered the first test

*See* **GAO** *on* **PAGE 4**

# GAO Says Nuke Program Needs Overhaul

*from* **PAGE 1**

of the Stockpile Stewardship Program — the redevelopment of the W87 warhead — as proof of the department's overall confusion. The project took two years longer than expected and ran $300 million over budget.

In addition, the report said, the Office of Defense Programs and the DOE facilities presumably under it have not always budgeted their money in the same way, creating even more confusion. The office's current budget scheme doesn't make clear distinctions between the overhead of running a weapons lab and the cost of specific weapons lab projects.

Consequently, the report said, DOE officials can't tell how much money would be saved by scrapping projects nor can they zero in on specific cost-cutting measures within a project.

None of this comes as any surprise to local nuclear activists. Greg Mello, of the Los Alamos Study Group in Santa Fe, called the weapons labs "a fiscal black hole" in an interview Thursday.

"There's the run-of-the-mill fraud and abuse in government, but this management problem is truly dangerous," he said. "It means the nation's nuclear weapons complex is actually being run by the contractors who have a financial interest in the decisions being made. It's truly not accountable to anyone."

Madelyn Creedon, deputy administrator for the department's Office of Defense Programs, sent a letter to the author of the report in November, two weeks after it was released to certain people within the DOE.

Creedon called the report "accurate and balanced," but pointed out that despite its problems, the Stockpile Stewardship Program has passed official muster four years in a row.

The secretaries of Energy and Defense, who annually report to the president on the program, told President Clinton last April that the "stockpile has no safety or reliability concerns," according to Creedon's letter.

The full report can be found on the World Wide Web at www.gao.gov.

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# Edition--Journal North Date--01/06/2001 Page-- 1

## Nuke Report Vexes Activists

**Jennifer McKee Journal Staff Writer**

Group Fears LANL Will Become Warhead Producer

Local activists fear Los Alamos National Laboratory could be the new home for a potential warhead plant alluded to in a State Department report released Friday.

Retired Gen. John Shalikashvili, former chairman of the Joint Chiefs of Staff, was tapped last year to review the failed Comprehensive Test Ban Treaty by President Clinton and Secretary of State Madeline Albright. He released his report Friday.

While much of his findings centered around the global spread of nuclear weapons, a small portion of the report focused on maintaining the nation's existing and aging supply of nuclear weapons, also known as "the stockpile."

"The National Nuclear Security Administration (a semi-autonomous arm of the Department of Energy) should make a decision as soon as possible about the need for a large scale plutonium pit remanufacturing facility," the general wrote.

Plutonium pits are the nuclear guts of a warhead and contain radioactive plutonium, which is known to decay over time. The United States currently has no manufacturing plant for nuclear bombs. Los Alamos National Lab has been designated as the official source of new or remanufactured pits, said lab spokesman Jim Danneskiold, although the lab hasn't built a weapons-ready pit in the four years since DOE officials christened it the nation's new pit center.

Greg Mello, of the Santa Fe-based Los Alamos Study Group, said the report all but points to Los Alamos as the site of any new larger-scale pit plant.

"That's been DOE's constant plan for the last eight years," said Mello, chairman of the lab watchdog group.

He pointed to reports from the DOE's Albuquerque Operations Office that call for an additional $500 million over the next 15 years for new buildings and facilities earmarked for expanded pit production.

He's vowed to oppose the growth tooth and nail.

"We will fight pit production at any level, other than simple maintenance of the technology, with all means at our disposal," Mello said. "The northern New Mexico community has fought this in the past."

But according to Danneskiold, Mello needn't arm himself just yet. True, Danneskiold said, Los Alamos is the only source of new pits in the country right now. But the lab was charged only with maintaining the know-how and technology to make new nuclear weapons, not the full-scale rebuilding of the nation's

nuclear weapons. Under the grandest projections, Los Alamos scientists will only be making 50 new pits a year, he said, and so far they haven't made a single one fit to be implanted in the nose of a warhead.

"There have never been any plans for large-scale pit manufacturing at Los Alamos," Danneskiold said.

Another anti-nuclear activist agreed.

Jay Coghlan of Nuclear Watch of Northern New Mexico, also based in Santa Fe, said Friday a pit plant on the mesa is the least of his fears.

More upsetting in Shalikashvili's report, Coghlan said, was the general's argument for both the Comprehensive Test Ban Treaty, which would forbid nuclear testing among member nations, and the need for new or remanufactured pits, which are part of the national Stockpile Stewardship Program. Stockpile stewardship, by rebuilding and making slight changes to the weapons, violates the 30-year-old Nuclear Nonproliferation Treaty, Coghlan said.

# LANL scientist is playing public-relations game

01/10/01 New Mexican


Dave Kraig's letter of Dec. 31 concerning the interagency Cerro Grande risk-assessment meeting of Dec. 18 — and the little bags of radioactive plants I brought to that meeting and gave to environmental regulators as a reminder of their responsibilities — was scientifically wrong in almost every way. Dave is a LANL environmental scientist and ought to know better. Perhaps he does.

First, Dave alleges that people at that meeting could have received a dose of radiation from those plants. Yet, at distances greater than about 2 feet, there was a zero dose of radiation from those bags. They emit beta radiation only, which is stopped completely by air. Dave, who experimented with our surveillance instrument and those bags, could see that for himself.

Dave alleges that I do not fear small radiation doses from those bags, and goes on to say that small doses of radiation are in fact not of concern for human health. Of cour[illegible] I fear small doses of radiation, as we all should, in proportion to the risk they pose. Despite a blizzard of industry-sponsored research trying to prove otherwise, the highest authorities in health physics — most of whom work for the nuclear industry in one way or another, of course — have never found any threshold below which radiation ceases to be dangerous.

During and after the Cerro Grande fire, it was a revelation that many scientists at LANL — contrary to practice in the nuclear industry — actually seem to believe, as Dave does, that low levels of radiation are not harmful. It is an ideology without which many LANL actions — and inactions — cannot be justified.

I brought those plants because I knew that remediation of LANL's radioactive legacy, and its continued large-scale radioactive dumping, were *not* going to be on the agenda at that meeting. In fact, there are no binding cleanup plans for contaminated groundwater or hundreds of contaminated soil sites at LANL, despite an expenditure of more than $500 million dollars in "cleanup" so far. It is a scandal on a terrific scale.

Yes, LANL has created an environment where some of the wild plants are dangerous. Dave and his colleagues should do something about them instead of spending so much money on what is, in effect, "public-relations science."

**Greg Mello**
director
Los Alamos Study Group
Santa Fe

Las Vegas SUN

January 11, 2001

# Group reveals covert NTS blasts

**U.S. may be using tests to develop nuclear warheads**

**By Mary Manning**
<manning@lasvegassun.com>
LAS VEGAS SUN

The United States is quietly searching for new uses for old nuclear weapons in research at the Nevada Test Site.

Department of Defense documents unearthed by a California anti-nuclear group show that explosions conducted in underground tunnels at the Test Site, 65 miles northwest of Las Vegas, may be used to develop small nuclear warheads capable of penetrating underground bunkers.

The explosions at the Test Site so far are conventional, not nuclear, so they do not violate international test-ban treaties. The documents do not indicate whether future nuclear explosions are planned.

The documents show the government is planning to experiment with deep-penetrating bombs this year, Andrew Lichterman, director of the Western States Legal Foundation of Oakland, Calif., said. The foundation acquired the documents through a Freedom of Information Act request.

The military could make new battlefield uses from old nuclear warheads, Lichterman said.

"It is clear they are researching how to make nuclear weapons more usable," he said. "I have to wonder if they will push the envelope based on what is in the defense budget."

The Energy Department and other weapons experts say there are no nuclear experiments proposed at the Test Site. Former President George Bush declared a moratorium on all underground nuclear blasts in September 1992, and the ban has been extended by President Clinton.

Since then the DOE has conducted 13 subcritical underground experiments, which do not create a nuclear reaction. In part, government scientists are learning how plutonium behaves when it is subjected to a blast from high explosives.

The tests are part of a program to maintain the existing U.S. nuclear arsenal, according to the DOE.

The DOE and the Defense Department teamed up in the 1990s to continue research into weapons' effects, building computer models to replace nuclear testing and filling in gaps of knowledge about nuclear weapons using the Test Site and other facilities.

Part of the Test Site's mission is to remain ready to resume nuclear weapon testing if the president orders it.

Independent nuclear weapons experts said the government is not crossing the line and is obeying the

nuclear test ban.

"Certainly the Defense and Energy Departments are stepping right up to the boundary on everything permitted short of nuclear testing," said Steven Aftergood, government secrecy project director for the Federation of American Scientists, a national watchdog group.

Greg Mello of the Los Alamos Study Group in New Mexico said the documents Lichterman released Wednesday are important to the public's understanding of how nuclear weapons fit into the nation's future military plans.

"They document the keen interest of the Defense Department managers of developing advanced nuclear weapons for a broad range of battlefield uses," Mello said.

The Test Site has been scrambling to find new projects to replace nuclear weapons testing, Mello said. The tunnel experiments with the Defense Department are part of those new directions.

The defense budget contributes roughly $12 million to the Test Site each year to keep the facilities ready to return to nuclear testing and to allow defense experiments such as those in the tunnel, he said.

"The Nevada Test Site is a good place to blow things up," Mello said.

Chris Paine, a scientist for the Natural Resources Defense Council, said the research at the Test Site and at defense facilities across the country is an effort to find new uses for old nuclear weapons.

"They are certainly studying new ways to repackage nuclear weapons components," he said.

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# News

# Mini-nuke tests go virtual

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By **Michael Stoll**
Of the Examiner Staff

Sometime around 2008, physicists at Lawrence Livermore National Laboratory plan to spar fusion reaction in a large dome, using the world's most powerful laser array to heat a BB-sizec pellet to 100 million degrees -- hotter than the core of the sun. This will be no academic exercise: the data could lead them someday to a source of clean and plentiful power. But it wil also demonstrate what happens the instant a thermonuclear bomb ignites, which the Department of Defense hopes will aid the design of miniature, ground-penetrating nuclear weapons that can take out an underground bunker without also killing everyone for miles around. Saddam Hussein and Osama bin Laden beware: America is looking at ways to make small-scale nuclear "smart bombs" practical.

One hurdle for our military had been the end of testing. The United States has not exploded nuclear bomb since 1992, and the 1996 Comprehensive Test Ban Treaty signed by United States and 159 other countries, would, if ratified, prohibit nuclear testing forever. So governme scientists are trying to show, through elaborate physics experiments and computer simulations that new weapons and new uses for old weapons will work. As long as those bombs do not actually exist, the military can avoid running afoul of the test ban or Congressional prohibitions on building "low-yield" nuclear warheads.

Anti-nuclear activists angrily object, saying that smaller nuclear weapons would be more like to be used in battle. But defense officials justify this line of research by saying they need a nev generation of weapons to maintain a technical edge over rogue nations and terrorists.

Though the experiments at the half-finished $3.9 billion National Ignition Facility at Livermor will be the most ambitious, they are just a small part of this effort. Similar research is happenir right now at more than a dozen other national labs, as computer programmers and technician: piece together an elaborate model of the damage hypothetical new munitions could do to tunnels, buried command-and-control centers and other so-called "hard targets."

The Livermore lab, 35 miles east of San Francisco, is also home to the world's fastest supercomputer, IBM's ASCI White, which can produce 12 trillion calculations per second and be used to simulate three-dimensional models of nuclear explosions of any size. At the Nevad Test Site, where 928 nuclear bombs were exploded above and below ground over 41 years, scientists are carving tunnels into the desert to test nuclear shock patterns using high-yield conventional explosives. And at Arnold Air Force Base in Tennessee they use the Decade Radiation Test Facility to expose bomb parts to levels of x-rays found only in a nuclear blast.

All this research is being done in the name of the Science-Based Stockpile-Stewardship program, the $5.1 billion-per-year Department of Energy effort to ensure that the U.S. nuclear weapons remains "safe, secure and reliable." Proponents of the program say its goal is merely to make sure existing weapons work and are refurbished when they age.

But internal Defense Department documents, released to the Western States Legal Foundation, an Oakland-based anti-nuclear group, show that the military's view of future uses the program includes the creation of new weapons systems.

1/6/01

"Precision engagement requires development of more discriminate weapons that have the lethality needed to hold difficult-to-kill targets at risk with minimized collateral effects," defense officials wrote in the Defense Technology Area Plan, dated February 2000.

Testifying before Congress this fall in hearings on funding for the Stockpile Stewardship program, Brig. Gen. Thomas F. Gioconda, acting deputy administrator for defense programs a the National Nuclear Security Administration, said the Department of Energy has so far dismantled 12,000 nuclear weapons. And he insisted that Army and Navy are not creating any new weapons, nor have they done so for 11 years. In 1994, Congress specifically prohibited research and development on low-yield nuclear weapons, which produce a blast of five kiloton or less -- about a third the power of the bomb that devastated Hiroshima in 1945.

But another senior defense official familiar with nuclear strategy said part of stockpile stewardship is the ability to design new weapons quickly if the United States were to change policy and authorize low-yield weapons development.

"It's really a 'what-if,'" the defense official said on the condition his name not be used. "We'd be prepared to have the answer, if and only if we were given permission in the future to proce on such a course. They're only concepts and we don't have any permission to ask the Department of Energy to build new weapons."

Andrew Lichterman, a researcher at Western States, said that while this research does not seem to violate any law, it treads close to the line that Congress drew in 1994. He also said it undercuts efforts to achieve a viable non-proliferation treaty, which calls on existing nuclear powers to de-emphasize, and eventually eliminate, nuclear weapons.

"The broad representation to the U.S. public of the Stockpile Stewardship program is that it merely to maintain the existing stockpile as we move toward their elimination," Lichterman sai "This is the clearest and most specific evidence we have found that they are using this progra to make nuclear weapons more usable."

The Defense Technology Area Plan, an annual internal policy review, became restricted as three years ago. Lichterman filed a request with the Defense Department through the Freedor of Information Act last July.

The documents also discuss other weapons, such as the B61-11 gravity bomb, which has been modified to work as a ground penetrator. The senior defense official said that was permitted because it was not a "new" weapon.

"The nuclear part of the B61 was unchanged," the official said. "So the fact that we put a ne case on an existing weapon, I don't consider that a new weapon. I think it's permissible to cre a capability with an existing weapon."

Pentagon critics say this contradicts public statements about what Stockpile Stewardship is about.

"If we were just maintaining the existing stockpile until such time as we could eliminate nuclear weapons pursuant to an international agreement, would we need the current Stockpile Stewardship program?" said Christopher Paine, who has researched the program for the Natu Resources Defense Council. "The answer is no. We would want something that is far smaller and simpler. It was sold to a cadre of Democrats and liberals who supported the test ban as a essential ingredient of the U.S. capability to maintain weapons under the Comprehensive Test Ban Treaty. The truth is the stockpile program is the capacity to maintain weapons -- and a lot more."

Greg Mello, director of the Los Alamos Study Group in Santa Fe, N.M., said the Departmen of Energy is misleading the public about the work of the program.

"There is definitely active deception going on with respect to Congress and ordinary folks ar employees," he said. "The lab people know what to do to sell their bombs. They've adopted ar industrial paradigm, and they have an industrial culture that searches for new niches for nucle bombs."

1/15/01

The Department of Energy, which runs the National Laboratories and builds nuclear weapc for the military, says it has no plans to build new bombs anytime soon.

"We are not developing any new nuclear weapons," said Floyd Thomas, a spokesman for tl department's National Nuclear Security Administration. "If somebody's up in some other agenc thinking of new weapons, we wouldn't know about it."

Some scientists, while sympathizing with activists' political complaints, dismiss their attacks on experimental and computational modeling of nuclear explosions. Wolfgang Panofsky, the retired director of the Stanford Linear Accelerator Center in Palo Alto, said that even though he and other physicists are opposed to producing low-yield nuclear bombs, he sees nothing wron with basic research short of designing new weapons for production.

Raymond Jeanloz, a professor of Earth and planetary science at the University of California Berkeley and a Stockpile Stewardship consultant for the Energy Department, said the program also necessary to train a new generation of nuclear scientists. In the next 10 years, most government physicists with experience in nuclear testing and design will retire, so a large part nuclear weapons research is meant to keep that nuclear know-how alive. U.S. scientists must practice their skills, he said, lest they forget how to maintain and build new weapons systems i a time of need.

"If we as a nation have nuclear weapons, the scariest thing would be to let the weapons dec and the expertise of the people who are handling them decay," he said. Yet he questions whether secrecy about the research is the best policy for the long term.

"This is a fact of our country and we have to keep examining this," Jeanloz said. "We are participants as taxpayers. The worst thing would be for the public to forget that we have nuclea weapons."

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AJ 1-17-01

# LANL Kicks Off Nuke Waste Transmutation Project

*Some scientists and activists, however, think this approach is not the answer*

By Jennifer McKee
*Journal Staff Writer*

It sounds like a simple, almost ingenious idea: Take the nation's 30,000 tons of spent nuclear fuel. Bombard it with neutrons to eat up the nastiest stuff in the garbage heap. In the end, you're left with a small amount of highly radioactive, although short-lived, waste and a big pile of low-level radioactive garbage that can be safely buried in many landfills.

It's called the "transmutation of nuclear waste," literally transforming radioactive nuclear materials into other, less problematic forms. Supporters, like Sen. Pete Domenici, R-N.M., say it just might take care of one the nation's most pressing nuclear problems: What to do with the radioactive leftovers of nuclear power. Critics call the idea a "shell game" of nuclear waste and say it costs more and generates more new waste than it's worth.

Domenici secured $34 million to fund a new program at Los Alamos National Laboratory to see if the technology will work. The lab officially christened the program last week, naming Edward Arthur the new director of the experimental program now called Advanced Accelerator Applications, or AAA.

He was in Albuquerque on Tuesday to announce the program.

"I have come to the conclusion that the United States has to get itself involved in new technologies surrounding nuclear power," he said in an interview with the Journal. "In order for the world to grow and have clean air, we don't have many alternatives."

Nuclear power plants, unlike their coal-burning cousins, don't really "burn" anything. Instead, they generate energy by creating controlled nuclear chain reactions — the same process that powers nuclear bombs but much tamer. The process changes the reactor fuel into a soup of other radioactive elements, including pluto-

*See* **LAB** *on* **PAGE 6**

**DOMENICI: Secured $34 million to fund experiment**

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# Lab Kicks Off Waste Project

*from* **PAGE 1**

nium.

Other countries, especially France, take that glob of spent mixmatched nuclear fuel, reprocess it and use it over again, said Pete Lyons, Domenici's science adviser. The United States, however, plans on burying it.

But that solution has problems. For one, Lyons said, no one particularly wants the waste in their back yard. And for another, the waste contains plutonium, which has a half-life of 24,000 years, which under government guidelines means the waste must be buried in repositories "guaranteed" for at least 10,000 years.

"Talking about what's going to happen in the next 10,000 years is more theology than science," he said.

The AAA technology, if successful, would use up all the waste's plutonium, leaving material with a half-life of only 300 years.

Lab scientists propose to build a special particle accelerator that would hurl neutrons at the waste. Ideally, the plutonium would absorb these neutrons, which would make it less radioactive. The process should also generate electricity, some of which would power the accelerator, but the extra could be sold on the open market.

Lyons cautioned that the program is an experiment. The process may prove too costly or too environmentally questionable to work in the real world.

Still, both he and the senator said they believe the technology holds too much promise to be ignored.

"We've got to find a much better solution to the permanent disposal of nuclear waste," Domenici said.

Some scientists and activists, however, think AAA is not an answer.

"It smacks of pork barrel politics between Domenici and the lab," said Jay Coghlan, of Nuclear Watch of New Mexico, a Santa Fe-based group.

The United States needs to learn from the mistakes of nuclear power, said Greg Mello, of the Los Alamos Study Group, another Santa Fe group, not chase "fantasy" technologies.

"There is no technical solution that will take away the responsibility for nuclear weapons," he said.

What's more, said Hisham Zerrissi, a consulting senior scientist for the Institute of Energy and Environmental Research, the technology doesn't actually "reduce" nuclear waste at all.

He doesn't argue the point that plutonium will "fission off" if saturated in neutrons. But you're still left with a bunch of radioactive uranium, he said.

Under current law, only "transuranic" waste is considered "high-level," which means only elements heavier than uranium such as plutonium must be buried in special, highly controlled repositories. Uranium, no matter how radioactive it is, is considered "low-level."

"It's a loophole," Zerrissi said. And under that loophole, the uranium left over from AAA technology can be buried in less secure landfills, even though it's as radioactive as some of the material buried at the Waste Isolation Pilot Plant, the repository for defense-generated nuclear waste in Carlsbad.

"This is going to create more dangers than it's proposed to solve," he said. "There's not a clear, clear argument for transmutation."

# Richardson backs LANL contract

1/20/01

*While some officials aintain new contract ll boost morale, critics nain skeptical*

By TOM SHARPE
For The New Mexican

n his last day as energy secretary, Richardson endorsed extending Los mos National Laboratory's 47-year tract with University of California 1 2005.

wanted to get this agreement done ore I left because I think there's no more important arrangement that exists," Richardson said.

"In the past year, we saw that we needed to be even more vigilant on issues of security at our defense labs," he said. "The new framework is what the department needs because it addresses today's unique national-security challenges."

Weapons critics said the changes are superficial.

"To us, it's like rearranging the deck chairs on the Titanic," said Jacqueline Cabasso of the Western States Legal Foundation in Oakland, Calif.

"To renew this contract on the last day of the Clinton administration is really sleazy," said Greg Mello of the Los Alamos Study Group in Santa Fe. "It's not appropriate for an institution of higher learning to lend objectivity to a weapons factory."

The new contract, inked Thursday by the UC board of regents, calls for the school to hire a new vice president for lab management and to subcontract out some security responsibilities at Los Alamos and Lawrence-Livermore labs.

Sen. Pete Domenici, R-N.M., said it should boost morale at Los Alamos in the wake of last May's Cerro Grande fire, which burned more than 40,000 acres around Los Alamos; the disappearance for about a month of two classified hard drives; and the Wen Ho Lee affair, in which the former LANL employee was charged with 59 counts of mishandling classified information.

"To be honest with everyone, in the past, we've had a contract with the University of California that wasn't very specific," Domenici said. "We didn't know in many cases what their responsibility was and, in hindsight, we would look to them and say the University of California failed. But if you looked at history, they weren't even expected to do anything in some of these areas. They're expected to now."

Richardson, a Democrat who was Northern New Mexico's congressman until President Clinton appointed him as U.S. ambassador to the United Nations and then as energy secretary, said he has briefed President-elect George W. Bush's choice for energy secretary, former U.S. Sen. Spencer Abraham, R-

1/20/01

# extension

Mich.

"His team is ready," Richardson said. "I am convinced that we have coordinated well. They're ready to act."

Domenici wished Richardson well with his new teaching job at Harvard.

"Frankly, I hope you have a great time, and I hope you don't have to think back at what we're doing here too often, because it is a tough job," he said. "I told your successor that it might, with the energy crisis that's upon us, be the hardest job in the president's Cabinet."

Richardson and Domenici spoke at a media availability at energy headquarters in Washington. They were joined by John Gordon, head of the National

Please see **CONTRACT**, Page B-5

# CONTRACT

**Continued from Page B-1**

Nuclear Security Administration; U.S. Rep. Ellen Tauscher, D-Calif., and, by phone, University of California Provost C. Judson King.

Asked about Thursday's announcement that the FBI had found no evidence of outside interference or espionage in the case of two restricted hard drives lost for about a month last summer before being found behind a copying machine, Gordon said the FBI was unable to determine exactly what happened.

"It turned out to be a very vexing problem," he said. "What we do have is a little information which we really can't go into in public."

King said the university will study the FBI report, but the university investigated the situation from a management perspective and took personnel actions last fall. He said privacy and personnel regulations forbid him from saying what those actions were or how many staffers were involved.

*The New York Times*, quoting anonymous sources, reported on Sept. 29 that among those to be disciplined are Bradley A. Clark, a scientist; Stephen M. Younger, head of the nuclear-weapons program; and John C. Browne, lab director.

King said a search process has begun to hire the new vice president of lab operations by next summer. The university is "to begin immediately with subcontracting for expertise in areas such as security," he said.

Marylia Kelley of Tri-Valley Communities Against a Radioactive Environment in the Oakland, Calif., area said the new contract has a provision that gives the Energy Department the right to remove any lab employee from Energy Department-funded work, subtly increasing its authority over the university.

U.S. Sen. Jeff Bingaman, D-N.M., said in a news release that during Thursday's confirmation hearings, Energy Secretary-designate Abraham said he would consider changes in the use of polygraphs so as to improve scientists' morale.

Floyd Thomas, director of communications for the National Nuclear Security Administration, created in March, said Gordon, a retired Air Force general, has a "three-year pass" to run the semiautonomous agency with jurisdiction over security in Energy Department defense programs, including weapons labs.

But Thomas said Congress, not Gordon, ultimately must set the policy on which lab staff members will be required to take routine polygraphs.

Paper: New Mexican, The (Santa Fe, NM)
Title: About radiation fears, bags of radioactive plants
Date: January 22, 2001
Section: Opine
Page: A-5

I'm confused about the issues that really concern **Greg Mello** (letters, Jan. 10). He stated that he fears low levels of radiation, yet he admits to bringing bags of radioactive plants to a public meeting and exposing the people present. Greg said that the bags were emitting only beta radiation and that at a distance of about two feet there would be no radiation dose. Anybody who professes to be knowledgeable about Los Alamos National Laboratory hazards and radiation should know that both these statements are false. Although the dose from the bags may have been small, it certainly was not zero.

Greg states that it was a revelation that many scientists at LANL think low levels of radiation aren't harmful. Many scientists at LANL have studied radiation, its interactions with matter and its effects on people and other systems, and they have enough sense to believe the preponderance of evidence that low doses of radiation aren't harmful. If low levels of radiation were harmful, we would see increased cancers in populations such as those in Santa Fe or Albuquerque because of the increase in natural radioactivity at higher altitudes. These increases are not seen in spite of numerous studies.

Greg accuses Dave Kraig of practicing ``public-relations science,'' yet Greg appears to be practicing what he's preaching against. The risk is only enough to seek publicity -- not to actually cause harm -- and Greg Mello appears to know this.

Brian Rees

Santa Fe

via e-mail

## DOMENICI PROPOSES SPENDING UP TO $1 BILLION A YEAR ON FACILITIES

Sen. Pete Domenici, R-N.M., last week proposed spending between $500 million and $1 billion annually during the next five to 10 years to upgrade an aging infrastructure within the National Nuclear Security Administration, a move that DOE watchdog groups called a tragedy.

Domenici, who called for the increased funding during a speech to Sandia National Laboratories, said the additional money would help address concerns often cited by lab officials and accentuated in a report issued earlier this month by the General Accounting Office (*IE/FL*, 8 Jan, 9). That report criticized the department for inadequate planning in determining how much funding it needs for weapons activities.

"The recent GAO report on stockpile stewardship provided many examples of facilities that are no longer capable of supporting the missions for which they were designed," the senator said. As an example, he noted that one of the beneficiaries would be a "compound semiconductor research facility," Domenici said.

While Domenici quoted the $500 million figure in a speech to SNL, he later expanded that number to $1 billion in a meeting with reporters. DOE received $5 billion for weapons activities in FY-01, $600 million more than the previous fiscal year and $400 million more than the department's request.

The senator said National Nuclear Security Administration chief John Gordon, who shares his concerns, supports the increases. Congress created NNSA in 1999 as a semiautonomous agency to coordinate weapons, nonproliferation and naval reactor programs. "General Gordon and I have discussed the issue and we've agreed to kick off a major initiative focused on infrastructure renewal in the weapons complex," Domenici said.

Domenici did not say how the additional funding would be allocated. But two nonproliferation groups blasted the notion of seeking more money for NNSA — arguing that it is unnecessary. Greg Mello, executive director of the Los Alamos Study Group, Santa Fe, N.M., said in an interview Thursday that DOE should focus on maximizing use of existing facilities, rather than seeking funds to build new ones. "Many of the facilities at Los Alamos are not old. The real problem is that they're under-utilized," Mello said.

**While Domenici has argued that an improved infrastructure is vital** to improve employee morale, Mello had a far different view of the reasons for building new facilities. "Most of the budget growth at LANL is not driven by mission need. It's driven by pork barrel politics."

Mello cited the Accelerator Transmutation of Waste program at LANL and at Lawrence Livermore National Laboratory's National Ignition Facility as two unnecessary projects. In the case of NIF, Mello said the proposed increase will encourage DOE to develop a new generation of nuclear weapons, instead of trying to maintain the existing stockpile. "What we need is a thorough inventory taken of DOE facilities to determine where we stand," he said.

While DOE has studied the facility needs of individual programs, it has not done so comprehensively, Mello said. "What the department needs in a independent audit that is not conducted in a political environment," Mello said. Mello acknowledged that Domenici's influence in Congress is extensive when it comes to DOE because the senator chairs the Senate Budget Committee and the Appropriations subcommittee on energy and water development. "While Senator Domenici may be able to get funding for programs like SSP and NIF, that doesn't mean that he can get them to actually work," Mello said.

And that reality could lead many fiscally conservative members of Congress, especially Democrats, to try to thwart any large increases in SSP, Mello said. "There are a lot of people who believe that stockpile stewardship is a joke and that it's nothing more than a poorly thought out enterprise," he said.

Marylia Kelley, executive director of Tri-Valley Communities Against a Radioactive Environment,

# Waste Found In Water

## Tritium Traces In LANL Well

By Jennifer McKee 2/8/01
*Journal Staff Writer*

Scientists at Los Alamos National Laboratory have found trace amounts of radioactive waste in the ground water near the lab's nuclear storage area, which may suggest the facility is leaking.

A monitoring well near lab Area G, a collection of dry nuclear waste stored above ground in oil drums, showed contamination by tritium, a radioactive form of hydrogen that seamlessly blends in with water. The findings were announced last week at a meeting of the lab Groundwater Integration Team.

The contamination was tiny — 109.2 picocuries of tritium per liter of water — and a minuscule fraction of the Environmental Protection Agency's drinking water standard of 20,000 picocuries.

Nonetheless, said lab spokesman James Rickman, the lab takes the finding seriously and hasn't ruled out the possibility that the tritium is leaking from Area G — the first time any deep ground-water contamination has been tied to the dump.

"It underscores our need for continued monitoring and surveillance," Rickman said.

Greg Mello, of the Santa Fe-based Los Alamos Study Group, said the contamination is cause for concern.

"We have a huge, nuclear waste dump (at Area G) to which more waste is added every day," he said. "It's located right next to a wetland and above a drinking water aquifer."

Area G is home to the equivalent of 45,000 drums of dry, solid nuclear waste, Rickman said — all of it eventually bound for the federal government's Waste Isolation Pilot Plant near Carlsbad.

The tritium, which was probably produced as either steam or water, is absorbed into a special kind of resin to make it solid. Then, it is

*See* **TRITIUM** *on* **PAGE 3**

# Tritium Found in Water

*from* **PAGE 1**

sealed in drums and stored in shafts drilled 65 feet into the ground, Rickman said. The shafts and barrels are designed to be more or less waterproof.

But older tritium storage wasn't so sound, he said, leading scientists to believe the tanks might be leaking. Still, Rickman said, the mesa where Area G sits is very dry and composed of volcanic rock that would not give water any easy pathway to the deep aquifer where the tritium was found. Such water migration would demand more water than typical Los Alamos rains.

The tritium also could have trickled into the aquifer from some place else near the lab and merely ended up in the aquifer near Area G, Rickman said. Scientists will continue watching the well to see if the contamination levels change.

The tritium definitely came from the lab, Rickman said. Both he and Mello agreed that the tiny amounts found in the well aren't dangerous.

The contamination was found in one of 10 monitoring wells on the lab to help scientists map the underground geology of the lab and how ground water moves through it, Rickman said. Such a picture will help scientists predict where possible lab-generated pollution may appear next and in what amounts. Then, Rickman said, they will be able to clean up the source of the contamination or plug it to keep it from further seeping into the aquifer.

So far, the lab has drilled 10 such wells, with plans to sink 22 more.

# Bio-Weapon Work At Labs Criticized

## Sandia, LANL Oversight Faulted; Public Health Not Jeopardized

BY JOHN FLECK
*Journal Staff Writer*

2/9/01

Sandia and Los Alamos national laboratories have been handling potentially dangerous biological weapons materials without proper scrutiny from the Department of Energy, according to a report by federal auditors.

After more than a year of investigation, the auditors criticized the department's oversight of the potentially dangerous work at the labs, but they said worker health and public health were never jeopardized.

Safety officials and senior managers at the department's Albuquerque Operations Office were in some cases not even aware the work was going on, according to the report.

The investigation was done by the Department of Energy's Office of the Inspector General, which does independent audits.

The lab research, aimed at defending soldiers or citizens from biological weapons attack, uses deadened

# Auditors Criticize Bio-Weapon Work Supervision

*from* **PAGE A1**

forms of plague, anthrax and other dangerous microbes.

In some cases, the materials are fragments of a microbe's DNA. In others, deadened microbes similar to those in vaccines are used in lab research.

The materials are used as a stand-in for the real thing in development of devices to detect and neutralize the microbes used in biological weapons.

Live microbes were never used at the laboratories, according to John-Olav Johnsen, manager of the DOE Albuquerque office's biological safety program, though there are plans to use live anthrax bacteria at Los Alamos at some point.

Regulations for handling dangerous microbes are set out by the federal government's Centers for Disease Control and Prevention. They are aimed at preventing dangerous microbes from escaping and threatening workers or the public.

"People here are extremely careful in complying with the CDC requirements," said Sandia spokesman Nigel Hey.

Los Alamos also follows CDC rules, said lab spokeswoman Nancy Ambriosiano.

The Inspector General's report cites several isolated incidents in which safety regulations weren't followed, but in general the problems identified in the report focus on DOE oversight of safety procedures rather than the safety itself.

"We found no evidence that the health of workers or the public was adversely affected," the report concluded.

Los Alamos and Sandia are among seven Energy Department labs doing more than $90 million per year in biological research.

U.S. work on biological weapons is banned by treaty. "No offensive biological weapons work has taken place in the United States since 1972," Johnsen said. But U.S. researchers are active in efforts to defend against biological weapons attacks by others.

The work at Sandia and Los Alamos is primarily in two areas — developing sensors to quickly detect biological weapons, and DNA analysis of the microbes.

Johnsen acknowledged the accuracy of the Inspector General's report but said it didn't mean the Department of Energy was unaware of the biological defense work going on at the labs.

DOE officials lower in the chain of command, at offices at Kirtland Air Force Base and in Los Alamos, were aware and providing oversight, he said.

The department's sometimes confused chain of command over the labs involves two layers of oversight — the Albuquerque Operations Office and two smaller local offices, the Kirtland Area Office at Sandia and the Los Alamos Area Office in Los Alamos.

While the Albuquerque Operations Office safety officials and managers were in some cases unaware of the biological defense work, their subordinates at the Kirtland and Los Alamos offices were aware and providing oversight to make sure the work was safely done, Johnsen said.

Johnsen acknowledged one case in which even that oversight broke down, when a Sandia researcher used deadened plague bacteria in an experiment.

In that case, the researcher notified the CDC and followed its guidelines for handling the material but didn't notify the Department of Energy, Johnsen said.

In addition, Johnsen acknowledged that a federally required environmental study for the plague research wasn't conducted.

"That one just fell through the cracks," Johnsen said.

While the investigation was under way last year, the DOE set up a "biosurety initiative" and placed Johnsen in charge of making sure there is proper scrutiny of all biological defense work.

JOURNAL NORTH 2/15/01

# Anti-Nuke Pledge Offered

BY JENNIFER MCKEE
*Journal Staff Writer*

Scientists created nuclear weapons, and it's science, says a group of physicists and nuclear weapons activists, that must wipe the weapons out.

During a San Francisco meeting of the American Association for the Advancement of Science, Greg Mello, leader of Santa Fe's Los Alamos Study Group, will unveil Saturday a pledge for physicists and engineers to sign swearing to not work with nuclear weapons.

"There are so many extremely important and interesting things for scientists to do, taking care of nuclear weapons is not one of them," he said.

Zia Mian, a physicist and research scientist at Princeton University, has already signed the pledge.

"There is a tradition going back to Einstein that nuclear weapons are a crime against humanity," Mian said. "It goes against the very spirit of what science is about."

Political will doesn't build nuclear bombs, he said, scientists do. Mian said scientists must be aware of their enormous responsibility to civilization.

"It's the scientists that matter," he said.

Mello said he hopes the pledge will prompt other effects, too, like showing the public that scientists have ethics.

> *"There are so many extremely important and interesting things for scientists to do, taking care of nuclear weapons is not one of them."*
>
> GREG MELLO, LOS ALAMOS STUDY GROUP

"It says that we as a society have not resigned ourselves to living under the threat of nuclear war forever," he said.

The pledge is sponsored by the study group, the Natural Resources Defense Council, Western States Legal Foundation and Tri-Valley CAREs, a nuclear weapons watchdog group that monitors the Lawrence Livermore National Lab in Livermore, Calif. It will be formally announced this Saturday at the San Francisco Press Club, although all the sponsors will also have a booth at the American Association for the Advancement of Science meeting.

Mian isn't the only scientist already signed on. Joseph Rotblat, winner of the Nobel prize in 1995 and the only Manhattan Project scientist to leave the project for ethical reasons, has added his signature.

Another signatory is Andreas Toupadakis, a scientist who once worked at both the Los Alamos and Livermore labs. He quit for ethical reasons and now teaches at a community college. The head physicist of Pakistan, a country eagerly pursuing nuclear weapons, has also signed on, Mello said.

Christopher Paine, a senior analyst of the Natural Resources Defense Council's nuclear program, said he doesn't expect the pledge to end nuclear weapons research overnight.

"But it is part of the process by which the world gets rid of them," he said. "This is where the American nuclear physics community has failed. There is a sort of collective moral failure. Scientists have been co-opted into the Department of Energy funding network. They offer either no opposition or lukewarm support and get a lot of research dollars."

This is not the first pledge of its kind. A group of Japanese scientists have a similar agreement, Mello said, and other movements have circulated across Europe.

But the pledge is the first comprehensive launch of such an idea, Mian said.

"We need to make a clear public statement," he said. "We expect lots of support for it."

Santa Fe New Mexican
In Brief, Staff and Wire Reports
Publication Date: 02/15/2001
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# Activists take their case to Scientists

Anti-nuclear activists across the nation, including Santa Fe lab watchdog Greg Mello, are launching a campaign next week encouraging scientists and engineers to sign pledges that they will never work on weapons of mass destruction -- namely, nukes.

The kickoff for the campaign happens at the annual meeting of the American Association for the Advancement of Science in San Francisco, where anti-nuke workers will have a booth.

Initial signers of the pledge include Nobel Laureate Joseph Rotblat, a physics professor at the City University of New York, Berkeley physics professors and others.

The groups plan to ask working scientists as well as science students in the nation's top universities to sign the pledge, which is a three-page document outlining why scientists should not use their skills to build weapons.

The anti-nuclear activists include the Los Alamos Study Group, the Natural Resources Defense Council, Tri-Valley CAREs and the Western States Legal Foundation.

2/17/01 Los Alamos Monitor

# Laboratory christens new nuclear waste accelerator

**The Associated Press**

The idea is to take highly radioactive spent nuclear fuel and bombard it with neutrons that eat up the worst of the problem, leaving only a small amount of highly radioactive waste and a large pile of low-level waste that can be buried in landfills.

Supporters of the concept, called transmutation of nuclear waste, say it might take care of the nation's problem of what to do with radioactive waste left by nuclear power.

Critics say it's a shell game that costs more and generates more new waste than it's worth.

Nuclear power plants generate energy through controlled chain reactions.

The process changes the reactor fuel into other radioactive elements, including plutonium, which has a half-life of 24,000 years, meaning it stays radioactive for tens of thousands of years.

The United States plans to bury such waste. Under federal guidelines, the waste must be buried in dumps "guaranteed" for at least 10,000 years, said Pete Lyons, science adviser to Sen. Pete Domenici, R-N.M.

"Talking about what's going to happen in the next 10,000 years is more theology than science," Lyons said.

Los Alamos National Laboratory, under a $34 million program, is researching transmutation technology. The lab officially christened the experimental Advanced Accelerator Applications program — AAA — last week.

The technology, if successful, would use up the waste's plutonium, leaving material with a half-life of only 300 years.

Lyons said the program is experimental, and the process may prove too costly or too environmentally questionable.

Still, he and Domenici believe it holds promise.

"We've got to find a much better solution to the permanent disposal of nuclear waste," Domenici said.

Some scientists and activists believe the accelerator process is not the answer.

The technology does not actually reduce nuclear waste, said Hisham Zerrissi, a consulting senior scientist for the Institute of Energy and Environmental Research.

Los Alamos scientists propose a special particle accelerator that would hurl neutrons at the waste. Ideally, the plutonium would absorb the neutrons, making it less radioactive.

Zerrissi does not argue the point that plutonium will "fission off" if saturated in neutrons, but said the process still leaves radioactive uranium.

Current law defines only elements heavier than uranium as "high-level" waste that must be buried in special, highly controlled dumps. Uranium, no matter how radioactive, is considered low level waste.

"It's a loophole," Zerrissi said.

Under that loophole, the leftover uranium can be buried in less secure landfills, even though it's as radioactive as some of the material buried in the Waste Isolation Pilot Plant near Carlsbad, a federal dump for nuclear waste generated by weapons programs.

"This is going to create more dangers than it's proposed to solve," Zerrissi said. "There's not a clear, clear argument for transmutation."

The United States needs to learn from the mistakes of nuclear power rather than chase "fantasy" technologies, said Greg Mello of the Santa Fe-based Los Alamos Study Group.

"There is no technical solution that will take away the responsibility for nuclear weapons," Mello said.

ENVIRONMENT

2/21/01

# HELP WANTED

## Who wants to be a nuclear physicist? No one.

BY WINIFRED WALSH

US Sen. Jeff Bingaman, D-NM, recently introduced a $238.8 million bill to recruit nuclear scientists over the next five years.

When nuclear scientists attend next week's American Association for the Advancement of Science conference in San Francisco, they will be lobbied by activists to take a pledge against building any new nuclear weapons. The Los Alamos Study Group, a Santa Fe-based watchdog organization, also will be there, campaigning to discourage the next generation of scientists from entering the nuclear field at all.

But the point may soon be moot.

A high percentage of today's nuclear scientists are nearing retirement age, and the number of college students majoring in the field is at an all time low. To be precise, only 106 freshmen nationwide chose nuclear science as their majors this year.

The drastic decline may be one of the surest signs that the Cold War is over. Most math- and science-oriented students have found that a career in nuclear science has less potential, both economically and otherwise, than other disciplines.

For example, upon graduation, students with bachelor's degrees in nuclear engineering can expect to make $45,000 a year; their computer engineering counterparts will start at $55,000, according to alumni statistics compiled at the University of California at Berkeley.

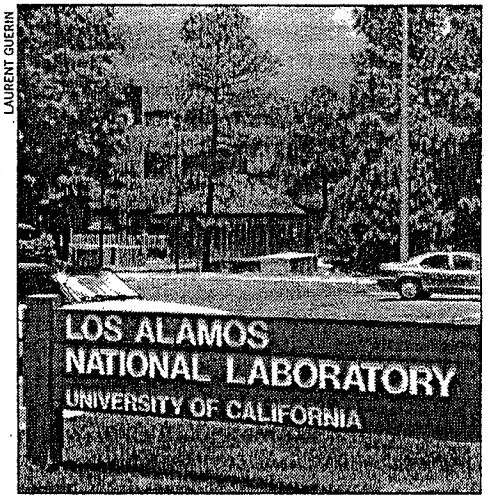
Add a master's degree or a doctorate and the gap widens. Computer engineers who complete a Ph.D will likely be hired at $85,000 a year; a nuclear engineer at $60,000.

But it's not just the money. Students want to be in a dynamic industry with a future. Many students shy away from the nuclear job market because they perceive the industry as a thing of the past, according to David Lochbaum, a nuclear safety engineer with the Union of Concerned Scientists.

"The jobs that are out there are to maintain the existing fleet of nuclear power plants. For most young engineers, the idea of building something new is more exciting than maintaining something your father built," Lochbaum said.

That's good news for activist organizations such as the Los Alamos Study Group, the Natural Resources Defense Council, Tri-Valley CAREs and the Western States Legal Foundation, which recently began a pledge campaign directed at scientists against the building of nuclear weapons.

LAURENT GUERIN




The number of nuclear scientists is dwindling at LANL—and around the country.

In today's climate, says Lochbaum, scientists are more likely to dismantle, than build, bombs.

And many of the industry's most challenging problems—what to do with nuclear waste, how to increase nuclear power safety and how to use nuclear power for medicinal purposes—fall under other disciplines, such as civil and environmental engineering.

As a result, many nuclear science programs have been swallowed up and integrated into other programs. What remains are 25 nuclear-science programs nationwide—the lowest amount there's ever been. Further, two-thirds of nuclear science faculty are over 45 years old.

But the nuclear scientist shortage is not just a few years down the line. Currently, the US is short approximately 350 nuclear scientists, according to a Nuclear Research Advisory Committee report. Los Alamos National Laboratory has about 25 positions open.

According to the NRAC, within five years, 76 percent of the nuclear scientists and engineers running nuclear power plants will be at retirement age.

As a result, the government is pushing to recruit more young scientists. Department of Energy labs such as LANL have an internship program with the Massachusetts Institute of Technology.

"We don't know where the new workers are going to come from," says Lochbaum. "It's hard to turn out young students if the industry is perceived as stagnant."

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URL: http://www.abqjournal.com/news/257898news02-22-01.htm

Thursday, February 22, 2001

# Terrorism Study Part of Bio Plan

**By Jennifer McKee** *Journal Staff Writer*

A proposed research lab at Los Alamos National Laboratory — one designed to handle live, dangerous organisms like anthrax — would not be used to build biological weapons, a group of lab and federal officials said Wednesday.

The Los Alamos lab wants to do research on small quantities of living, potentially deadly, biological agents, said Jill Trewhella, director of the lab's Biological Sciences Division. Los Alamos scientists currently research the DNA of such organisms, but are not equipped to handle any live batches. The new lab, which is far from a reality at this point, would be specifically designed to safely handle small amounts of such organisms.

"We're talking about teaspoonfuls," Trewhella said.

The lab says its research in anthrax, for example, is vital to understanding its use in rogue, terrorist weapons. The lab also studies naturally emerging diseases like tuberculosis and influenza.

Both she and John-Olav Johnsen, manager of the Department of Energy's Biosurety Initiative in the agency's Albuquerque office, vehemently asserted that the new lab would have no role in the development of biological weapons which would violate both federal and international law.

"That is the government's position," Trewhella said. "That is our society's position. That is the position of this lab, and that is my position."

Several lab and DOE officials spoke with the media Wednesday, detailing the kinds of disease-causing organisms that would be handled at the proposed lab and the safety measures the lab would use.

The proposed new lab has upset many local groups, who say LANL's recurring safety and security problems, along with its history of secrecy and deadly weapons make the place a poor candidate for any kind of bioterrorism research.

Los Alamos wants to build a Biological Safety Level Three, or BSL-3 lab, a designation assigned by the U.S. Centers for Disease Control and Prevention which sets the industry's standards. According to CDC information, there are four levels of research lab security. High school chemistry rooms typically have a BSL-1 lab — they handle only agents not known to cause diseases and require simple safety precautions like protective glasses and lab coats.

Slightly higher on the danger list lie BSL-2 labs, which Los Alamos currently has, as do most hospitals and dentists' offices. These labs are set up to handle live, disease-causing organisms, but only things like measles or salmonellae, which do not necessarily kill people.

The top tier of labs are BSL-4, and only three exist in the nation. These places are very secure and handle the most deadly and mysterious of diseasing-causing organisms, like Ebola.

What Los Alamos wants is something in between. The proposed BSL-3 lab would be set up for batches of live and potentially deadly organisms, but nothing for which there is no vaccine nor cure. That includes live batches of tuberculosis or anthrax.

Many local groups say they have no problem with the research but are very concerned about the Los Alamos lab, birthplace of nuclear weapons, working with any bioterrorist agent.

Peggy Prince, executive director of Peace Action New Mexico, cited the lab's dubious safety and security history.

2/22/01

"They have absolutely no business doing this," Prince said in a phone interview. "They should not be taking on any additional work."

Her group has publicly called for the Los Alamos lab plans to be "stopped immediately."

Jay Coghlan, of Nuclear Watch of New Mexico, also questioned the placement.

"We're not against strictly defensive research," he said. "But it's provocative to have it at what I would argue is the most aggressive nuclear weapons lab."

Hundreds of other such BSL-3 labs exist nationwide; he wonders why one of them can't conduct this research.

Greg Mello, of Santa Fe's Los Alamos Study Group, has also spoken out against the new lab.

"Even if this particular building is open for public entry, its presence at the lab and the growth of biological sciences there suggests that there may be dozens of other labs in other buildings at Los Alamos that are not open," Mello said, questioning the expansion of Los Alamos's biological interest.

Furthermore, he said, a "secret nuclear weapons lab" is not the place for any research on live, bioterrorist organisms. For decades, the lab has operated with secrecy, he said, but keeping secrets about deadly disease research would only stir suspicions.

Mello did not question the value of the lab's proposed research, but said that some other government agency, like the CDC, would be a better place for it.

Trewhella said she's sensitive to those concerns. She specifically requested that the new lab, if it is built, be located on a part of LANL property that is entirely open to the public. Nothing in the biological lab would be secret, she said.

CDC measures also require that all the living agents be destroyed after they are studied, she said, so the lab would never accumulate a stockpile of bioterrorist organisms.

In addition, she said, the building would be kept at negative pressure, so no spills could escape, and all the air in the building would be pumped and sifted through two special screens before it escapes into the outside air.

For now, the proposed live organisms lab is in its earliest planning phase. The DOE is conducting its first environmental study, a process that also includes the wishes of the public. The department has scheduled just one public meeting, however, today at its Los Alamos office.



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## LANL: Lab Not for Weapons

**Jennifer McKee Journal Staff Writer**

Terrorism Study Part of Bio Plan

A proposed research lab at Los Alamos National Laboratory one designed to handle live, dangerous organisms like anthrax would not be used to build biological weapons, a group of lab and federal officials said Wednesday.

The Los Alamos lab wants to do research on small quantities of living, potentially deadly, biological agents, said Jill Trewhella, director of the lab's Biological Sciences Division. Los Alamos scientists currently research the DNA of such organisms, but are not equipped to handle any live batches. The new lab, which is far from a reality at this point, would be specifically designed to safely handle small amounts of such organisms.

"We're talking about teaspoonfuls," Trewhella said.

The lab says its research in anthrax, for example, is vital to understanding its use in rogue, terrorist weapons. The lab also studies naturally emerging diseases like tuberculosis and influenza.

Both she and John-Olav Johnsen, manager of the Department of Energy's Biosurety Initiative in the agency's Albuquerque office, vehemently asserted that the new lab would have no role in the development of biological weapons which would violate both federal and international law.

"That is the government's position," Trewhella said. "That is our society's position. That is the position of this lab, and that is my position."

Several lab and DOE officials spoke with the media Wednesday, detailing the kinds of disease-causing organisms that would be handled at the proposed lab and the safety measures the lab would use.

The proposed new lab has upset many local groups, who say LANL's recurring safety and security problems, along with its history of secrecy and deadly weapons make the place a poor candidate for any kind of bioterrorism research.

Los Alamos wants to build a Biological Safety Level Three, or BSL-3 lab, a designation assigned by the U.S. Centers for Disease Control and Prevention which sets the industry's standards. According to CDC information, there are four levels of research lab security. High school chemistry rooms typically have a BSL-1 lab they handle only agents not known to cause diseases and require simple safety precautions like protective glasses and lab coats.

Slightly higher on the danger list lie BSL-2 labs, which Los Alamos currently has, as do most hospitals and dentists' offices. These labs are set up to handle live, disease-causing organisms, but only things like measles or salmonellae, which do not necessarily kill people.

The top tier of labs are BSL-4, and only three exist in the nation. These places are very secure and handle the most deadly and mysterious of diseasing-causing organisms, like Ebola.

What Los Alamos wants is something in between. The proposed BSL-3 lab would be set up for batches of live and potentially deadly organisms, but nothing for which there is no vaccine nor cure. That includes live batches of tuberculosis or anthrax.

Many local groups say they have no problem with the research but are very concerned about the Los Alamos lab, birthplace of nuclear weapons, working with any bioterrorist agent.

Peggy Prince, executive director of Peace Action New Mexico, cited the lab's dubious safety and security history.

"They have absolutely no business doing this," Prince said in a phone interview. "They should not be taking on any additional work."

Her group has publicly called for the Los Alamos lab plans to be "stopped immediately."

Jay Coghlan, of Nuclear Watch of New Mexico, also questioned the placement.

"We're not against strictly defensive research," he said. "But it's provocative to have it at what I would argue is the most aggressive nuclear weapons lab."

Hundreds of other such BSL-3 labs exist nationwide; he wonders why one of them can't conduct this research.

Greg Mello, of Santa Fe's Los Alamos Study Group, has also spoken out against the new lab.

"Even if this particular building is open for public entry, its presence at the lab and the growth of biological sciences there suggests that there may be dozens of other labs in other buildings at Los Alamos that are not open," Mello said, questioning the expansion of Los Alamos's biological interest.

Furthermore, he said, a "secret nuclear weapons lab" is not the place for any research on live, bioterrorist organisms. For decades, the lab has operated with secrecy, he said, but keeping secrets about deadly disease research would only stir suspicions.

Mello did not question the value of the lab's proposed research, but said that some other government agency, like the CDC, would be a better place for it.

Trewhella said she's sensitive to those concerns. She specifically requested that the new lab, if it is built, be located on a part of LANL property that is entirely open to the public. Nothing in the biological lab would be secret, she said.

CDC measures also require that all the living agents be destroyed after they are studied, she said, so the lab would never accumulate a stockpile of bioterrorist organisms.

In addition, she said, the building would be kept at negative pressure, so no spills could escape, and all the air in the building would be pumped and sifted through two special screens before it escapes into the outside air.

For now, the proposed live organisms lab is in its earliest planning phase. The DOE is conducting its first environmental study, a process that also includes the wishes of the public. The department has scheduled just one public meeting, however, today at its Los Alamos office.

Public hearing

The Department of Energy has scheduled one public meeting on the proposed new research lab, 2-8 p.m. today at the DOE's Los Alamos office, 528 35th St. Comments may also be sent to the office, 528

35th St., Los Alamos, NM 87544, Attention: Elizabeth Withers; or e-mailed to ewithers@doeal.gov.

Friday, February 23, 2001

# Ebola Expert Backs Bio Lab

**By Jennifer McKee** *Journal Staff Writer*

One of the doctors who helped identify the deadly Ebola virus said plans for a new research lab at Los Alamos National Laboratory — one that would bring live batches of dangerous organisms to the mesa — is "better" than safe.

"There is absolutely no danger," said Karl Johnson, a virologist and adjunct professor of biology at the University of New Mexico. Johnson formerly worked with the U.S. Centers for Disease Control and Prevention's investigation of Ebola and reviewed LANL's plans for the new research lab. "I would be happy to live within 50 feet of it."

Los Alamos lab wants to build a new laboratory — one specifically outfitted to handle live, disease-causing microbes — designated as a Biosafety Level Three, or BSL-3 in CDC lingo. The CDC has strong oversight in all such laboratories, including any to be built at LANL.

The plan has drawn fire from local critics who say LANL has too many safety and security problems and too long a history of secrecy and bomb making to be a good home to any biological research.

The new research lab is in the early planning stages. Los Alamos lab and DOE officials held the only scheduled public meeting about the proposed lab Thursday, where Johnson and many DOE and LANL officials milled with the public talking safety and microbes.

Critics, like Greg Mello of the Los Alamos Study Group, and Joni Arends of Concerned Citizens for Nuclear Safety, who both attended the meeting, said LANL is simply not the place for such research.

Arends said she believed the presenters, but simply doesn't trust the DOE.

"The DOE does what the DOE wants," she said. "The assurances of these good-hearted people doesn't assuage our fears."

While the new lab may have no weapons-related role now, what's to stop the DOE from changing the lab's mission in the future, she asked.

Mello agreed.

"It's just not a good idea to put a bioweapons facility of any kind in a secret nuclear lab," he said. "This isn't a good place for it."

James Freyer, acting deputy director of LANL's biosciences division, which would control the new lab, said Los Alamos lab officials would not have the final say on anything that goes on in the new research laboratory. The CDC lays the rules for how the lab must be designed and also keeps tight tabs on all live biological agents everywhere in the nation. Furthermore, he said, the biosciences division has an Institutional Biosafety Committee, made up of both lab and local people. That committee makes all decisions for LANL's current biological research and would make all decisions about research for the proposed lab.

Not even Los Alamos National Laboratory Director John Browne can overrule the committee, he said.

"That's unique in all (of LANL)," Freyer said.

3/8/2001

# Domenici: Nuke power could solve energy crisis

By KRISTEN DAVENPORT
The New Mexican

While President Bush suggested Wednesday the United States move toward clean coal to solve national energy woes, New Mexico Republican Sen. Pete Domenici introduced a bill with his own ideas on addressing the energy troubles: more nuclear power.

Domenici is sponsoring a bill in the U.S. Senate with a five-pronged approach to support and increase nuclear power.

Among his ideas is increasing the budget for a Los Alamos National Laboratory program, known as Advanced Accelerator Applications, that hopes to convert spent nuclear fuel to electricity.

"We risk our nation's future prosperity if we lose the nuclear option through inaction," Domenici said in a press release.

Right now, about 22 percent of the nation's energy comes from nuclear power plants.

Domenici said the United States shouldn't get rid of that nuclear power until scientists and others can "specify with confidence" how it will be replaced.

No nuclear power plants have been built in 20 years; Domenici blames unreasonable regulatory hurdles.

But those who oppose nuclear energy say the process is dangerous and messy, and contend there are dozens of better ways to create energy.

Greg Mello with the Los Alamos Study Group said the Los Alamos advanced-accelerator program in particular could leave mountains of waste.

"There's no technical merit to this project," Mello said. "This is strictly pork for Los Alamos."

But Domenici said the nation shouldn't put all its power eggs in one basket.

"Nuclear energy is not the end all, be all of our energy needs," he said. "In fact, there is no single silver bullet that will solve our nation's thirst for clean, reliable, reasonably priced energy sources."

The Nuclear Energy Electricity Assurance Act, introduced Wednesday, supports nuclear energy in a variety of ways, he said. It elevates U.S. Department of Energy jobs governing nuclear energy to assistant secretary positions and gives millions to research and development of new plants.

# Bush's budget would slash energy funding

▶ *The announcement comes at a time Bush calls 'an energy crisis'*

Knight Ridder Newspapers

WASHINGTON — Days after telling the nation that there's a real energy crisis and vowing to "promote alternative energy sources and conservation," President Bush is proposing a budget that would slash federal spending on energy efficiency and renewable energy by as much as a third.

Bush proposes to cut the Department of Energy's renewable fuels and energy- efficiency budget by 30 to 40 percent, according to Energy Department and White House officials who have briefed energy and environmental lobbyists. That will be offset somewhat by an increase in grant programs to help low-income people weatherproof their homes, DOE officials said.

While the president is weeks away from releasing his energy policy, his proposed Energy Department budget is another indication that the administration will emphasize increasing oil, natural gas and coal production more than cutting energy demand or developing alternatives to fossil fuels.

"It's all too soon to tell how we're going to allocate our little more than $19 billion budget," said Energy Department spokesman Joe Davis. "We're expecting to deal with belt-tightening."

Office of Management and Budget Director Mitch Daniels told Sen. Jeff Bingaman, D-N.M., that the cuts are necessary because the president wants to boost spending on "clean coal" technology to make the workhorse fossil fuel more efficient and less harmful to the environment, according to Bingaman.

However, the coal-technology program that would get the money has produced few usable results and has nearly $600 million in unspent money, according to a report a year ago by the congressional General Accounting Office.

Bingaman, the ranking Democrat on the Senate Energy Committee, said the proposed cuts in energy-efficiency programs don't make sense.

"Clearly, if we don't dedicate adequate resources to (research and development), we lose out on our ability to benefit from this technology," Bingaman said.

Bush's proposed $19 billion DOE budget is $700 million less than what the department now spends. But it's the cuts in energy-conservation and efficiency programs that have angered environmental groups and Democrats such as Bingaman.

The DOE's $1.2 billion-a-year energy-conservation program has already saved $30 billion and 5.55 quadrillion BTUs of energy, according a 2000 Department of Energy report. That's enough to power the entire country for three weeks, and more power than Florida, Minnesota and South Dakota used in all of 1997, the most recent year for which energy consumption figures are available.

However, an administration official who requested anonymity said the White House believes "there hasn't been much mileage" from federal energy- efficiency research and development. The president's energy task force, chaired by Vice President Cheney, will be "taking a close look" at energy- efficiency spending, especially in light of the budget plans, the official said.

A 1996 GAO report found that previous Energy Department claims of savings were inflated and had mathematical errors, but it acknowledged that the program had saved billions of dollars.

"I'm flabbergasted that we would be cutting this type of budget at the very moment the country is facing some of the biggest energy problems we've been seeing in decades," said Dan Reicher, who was assistant energy secretary for energy efficiency and renewable fuels in the last years of the Clinton administration.

Last year, Reicher's office touted 11 research and development "success stories" for energy efficiency and renewable fuels. They included claims that:

- New window glazing developed by the Lawrence Berkeley National Laboratory would lower the nation's cooling costs by $1.3 billion by 2010.
- Compact fluorescent light bulbs developed at the same lab and sold since 1998 will save $41 million over seven years.
- The Energy Department helped developed lightweight materials for car parts that have saved more than 6 billion gallons of gas and $7 billion since 1978.

Paper: Albuquerque Tribune, The (NM)
Title: Dropping bombs on Los Alamos
Author: Lawrence Spohnlspohn@abqtrib.com / 823-3611
Date: March 16, 2001
Page: A1

With billboards, studies and a new campaign to foil recruitment, tiny nonprofit takes aim at the national lab
SANTA FE The sign on Greg Mello's door mockingly shouts "Fallout Shelter."

On his top shelf are "radioactive active plants" collected, he says, from polluted lands 35 miles to the west.

There, in the picturesque Jemez Mountains, is the object of Mello's frustration: Los Alamos National Laboratory.

It is the birthplace of nuclear weapons and still the world's premier nuclear weapons lab one of three administered by the Department of Energy.

Some 60 miles to the south, along I-25and Albuquerque's Gibson Boulevard, those frustrations are expressed for all to see.

Along these roads are several giant billboards, put together by Mello, that display (at a cost of about $4,000 a month) the infamous atomic mushroom cloud and describe New Mexico as "America's nuclear weapons colony."

"It's true," says Mello, executive director of the **Los Alamos Study Group**, which has been bird-dogging Los Alamos Lab since 1989.

New Mexico, he points out, is easily the nation's top nuclear weapons state, with installations that include Los Alamos and Sandia national laboratories, the Department of Energy's Albuquerque Operations Office and one of the nation's biggest nuclear weapons storage depots on Kirtland Air Force Base.

While lab defenders and proponents point to the billions of federal dollars these facilities bring annually into the state, Mello and the **Los Alamos Study Group** counter that New Mexico fits the classic definition of a colony in which imperialist capital is invested to extract a local resource at the expense of the colony's overall health, economy and social well-being.

He argues that it is no coincidence that New Mexico, even during the greatest economic expansion in U.S. history, continues to rank near the bottom in most economic and social measurements, including per capita income, education, child welfare, drunken driving and health care.

The mild-mannered Mello says that long after the Cold War has waned, New Mexico's nuclear weapons culture continues "to hold hostage not just the Congress and the people of the United States, but the whole planet."

The study group has been ardent and audible in its criticism of Department of Energy plans to consolidate the nation's far-flung nuclear weapons complex in a miniature, virtually self-sufficient version at Los Alamos.

Citing DOE plans to use Los Alamos Lab to produce perhaps hundreds of plutonium pits the atomic triggers for thermonuclear bombs Mello says simply: "This is not nuclear disarmament."

Mello said he believes nuclear weapons, in and of themselves, are as evil as the mass murder technology used by Nazi Germany, and should be opposed by all people on fundamental humanitarian and environmental grounds.

Still, Mello is not a stereotypical rabid, anti-nuclear activist. Instead, he challenges Los Alamos with a growing portfolio of analyses and arguments that raise questions about what the lab is doing and where it is going.

Long known on the hill as the thinking anti-nuke group, LASG, quite naturally, isn't embraced by the lab, which is frequently bashed in LASG news releases and besieged by the group's Freedom of Information Act requests.

Officially, says Christina Armijo, Los Alamos Lab community relations director, "the study group has been an important element in advancing constructive dialogue."

She said the group's scrutiny has stimulated "interest in the diverse opinions about the laboratory's mission."

"Our mutual interactions and dialogue, despite our differing stances on the work that we do, have proven to be appreciatively respectful and civil in nature over the years," Armijo adds.

Mello's group was reserved during last year's Cerro Grande Fire, during which other environmental and anti-nuclear critics raised questions about radioactive contaminants in the smoke plume.

Still, the study group has produced its share of heat on the hill.

Mello's group won a battle with Los Alamos' Bradbury Science Museum, which chronicles the nuclear era at the lab. It got wall space to display an alternative picture: the human ravages and devastation endured by Japan's Hiroshima and Nagasaki, the only cities bombed with nuclear weapons.

A Los Alamos veterans and lab retirees group countered with its own claim for museum space to present a view of a prewar, barbaric Japan. They got half of the wall.

Still, the confrontation, like others LASG has forged, forced the lab and its proponents to at least engage in the debate and defend their views.

An engineer by training, Mellohasn't favored confrontation. He has taken an intense analytical approach to assessing the lab's programs, plans and budgets exposing what he believes is a mentality of "nukes forever" and "a colossal waste of resources."

Indeed, much of the time, he sounds like Don Quixote in his quest to rein in the lab.

"We are interested in social justice, stewardship of the Earth, human dignity and economic sustainability," he says of the study group.

These fundamental values, he says, cannot be squared with the development, threat or use of nuclear weapons. While he appreciates the need for the United States to safeguard and maintain its current nuclear weapons stockpile, he firmly believes it is a role, that along with the stockpile itself, ultimately can end.

Equally opposed to the continuing nuclear engineering mission of nearby Sandia Labs in Albuquerque, Mello nevertheless says it shines in contrast to the entrenched Los Alamos.

He offers praise albeit faint for Sandia, saying that unlike Los Alamos, it at least has made substantial strides in broadening its core mission to include energy and environment as key national security components.

But in his David-and-Goliath struggle, Mello has no illusions about winning a public relations war with Los Alamos.

The lab has some 6,800 employees working on a 43-square-mile federal reservation and a $1.2 billion annual budget.

In contrast, Mello's nonprofit group has an annual budget of about $150,000, the bulk provided by grants from some 17 civic foundations and by "many small donors."

Housed in a back-hallway, three-room office off Santa Fe's Marcy Street, the study group has just two full-time staff members, several part-time volunteers and four outside people who do "contract" writing or analysis work.

"Not," he muses, "the stuff to launch a revolution."

But just enough to follow the environmentalist's mantra of thinking globally while acting locally.

The **Los Alamos Study Group** draws strength from its affiliation with the global Alliance for Nuclear Accountability. It also maintains strong ties to East and West Coast anti-nuclear organizations, including:

*The Natural Resources Defense Council, in Washington, D.C., a broad environmental watchdog with expertise in nuclear issues that is considered the best independent source of nuclear weapons information.

*Tri-Valley Cares, Inc., in Livermore, Calif., which monitors Los Alamos sibling Livermore National Laboratory.

*Several other anti-nuclear organizations in Santa Fe and Albuquerque, which have primarily focused on opposing the DOE's Waste Isolation Pilot Plant, near Carlsbad, and on environmental issues at Sandia Labs.

*Western States Legal Foundation, in Oakland, Calif., an independent watchdog, which like NRDC, tackles a broad range of nuclear weapons issues.

In 1997, many groups, including the **Los Alamos Study Group**, collaborated in filing a lawsuit against the DOE, charging that its nuclear stockpile stewardship program violates environmental law. The lawsuit failed to stop construction of the controversial National Ignition Facility, a nuclear blast simulator at Livermore Lab. But it did force DOE to agree to several reforms, including providing $6.25 million for community and tribal monitoring of its environmental programs.

Last month, several of the same groups collaborated again in issuing a public challenge to all scientists and engineers to renounce weapons of mass destruction, signing a pledge promising never to work on them.

Mello, who helped coordinate this effort, says it is primarily aimed at young scientists, whom the weapons labs have already acknowledged difficulty in recruiting to replace retiring weaponeers.

Like many of the group's efforts, "the pledge" aims to force Los Alamos to justify what it is doing.

It also is an opportunity to publicize what Mello sees as the post-Cold-War nuclear contradiction: the almost exponential growth of nuclear weapons research and development to levels that he says now exceed nuclear weapons spending at the height of the Cold War.

While many New Mexicans applaud the infusion of funds as a sign of healthy national labs, Mello says it is a ruse. Much of the money actually gets spent outside the state on unique materials, equipment and programs, he argues. And the trend has made it difficult, if not impossible, for the state to even consider economic alternatives, he says.

Mello, who recently recruited Colorado College Economics Professor William Weida to the LASG board of directors, believes it is appropriate to challenge Los Alamos Lab on economic, as well as national security, military and philosophical grounds.

Weida, a retired Air Force colonel and former Air Force Academy professor, couldn't agree more.

In fact, Weida said he believes government-financed economic studies have misrepresented the true impact of the labs in New Mexico.

The incoming federal dollars are "unevenly spread across the state, and unfortunately it doesn't trickle down," he says.

Weida, who spent years in the non-nuclear contingent at the Pentagon, says many military leaders see nuclear weapons as an egregious waste because their is virtually no chance they will actually be used.

They "are way beyond being moral weapons," he says.

Weida said he likes the study group's eye-catching billboards because in a small but frontal way they are "raising consciousness in several quarters, not the least of which is among the physicists themselves."

Mello acknowledges his group has had practically zero impact on ever-increasing nuclear weapons budgets and expansion at Los Alamos and other nuclear weapons facilities.

"Maintaining the stewards," he observes, chuckling, "has become more important than the stockpile."

"We don't know if we will be successful," he says. "But there are those with greater insight than me who are quite optimistic about the human spirit and the power of our good side to overcome our dark side."

Watchdog on the Web

To learn more about the **Los Alamos Study Group**'s concerns about Los Alamos National Laboratory, go to its Internet Web site: www.lasg.org/

Among the concerns expressed there:

*Details about hundreds of radioactive and hazardous waste sites at the lab.

*A report on slightly radioactive ants and plants contaminated by lab operations.

*The lab's role in future nuclear weapons development.

*Criticisms of the nation's nuclear weapons Stockpile Stewardship Program.

*A pledge scientists can take promising not to use their knowledge and talents to help develop weapons of mass destruction.

Author: Lawrence Spohnlspohn@abqtrib.com / 823-3611
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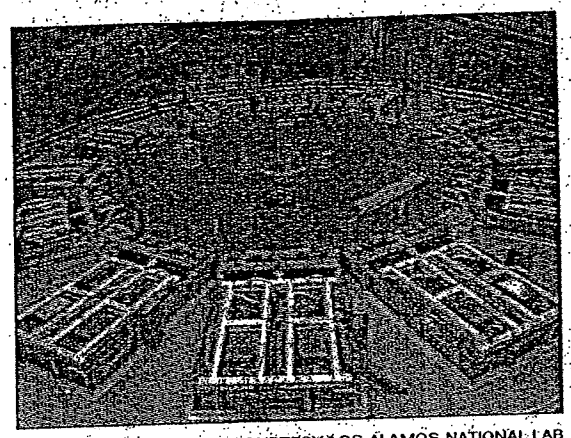
# Pricey Lab Project Under Attack

3/17/01



COURTESY LOS ALAMOS NATIONAL LAB

**DETONATION TEST: The Atlas machine, which stores electricity and shoots it out in bursts to simulate parts of nuclear weapons detonations, is slated to be moved from Los Alamos National Laboratory to Nevada.**

## Need for Machine Disputed by Study

BY JENNIFER MCKEE
*Journal Staff Writer*

Just two months after the Department of Energy unveiled a $49 million machine at Los Alamos — and as it prepares to spend another $12 million moving it to Nevada — a DOE investigation released last month questions whether the machine is necessary at all.

Critics, supported by some in Congress, contend that the move of the multimillion-dollar machine is even a mere bargaining chip in the larger effort to pass a federal budget.

The Atlas Pulsed Power Experimental Facility came online at Los Alamos National Laboratory in December, according to an audit report published in February by the DOE Inspector General's Office.

Atlas stores up electricity, then shoots it out in intense bursts that simulate parts of nuclear weapons detonations, according to lab information. The machine was designed to help test weapons' reliability. Aside from test runs, however — all of which show the machine works exactly as planned — Atlas has never been used.

That's because the DOE never allocated any money to run Atlas, only to build it, according to the audit. The audit reported that the DOE still hasn't set aside funding to operate Atlas, although the agency now proposes to move the machine to its Nevada Test Site at a cost of $12 million.

The Inspector General's audit questioned just how valuable Atlas is to the DOE.

"If Atlas was important enough to build," the audit says, "then it should have received enough priority ranking to allow it to operate."

A spokesman for the National Nuclear Security Administration, the semi-autonomous arm of the DOE that oversees parts of the weapons labs, said the agency disagrees with the report.

"The people that are involved in project management see (Atlas) as an important tool," said Darwin Morgan, an NNSA spokesman.

Some outside the lab, however, praised the report.

*See* **PRICEY** *on* **PAGE 2**

# Pricey Lab Project Under Attack

*from* **PAGE 1**

Greg Mello, of the Los Alamos Study Group, a Santa Fe watchdog organization, called it "a small measure of truth bubbling up to the surface."

Moving Atlas to Nevada when the machine has been completed for only a few months at Los Alamos is a waste of money, Mello said. He said the move is a way to curry favor with Nevada's Sen. Harry Reid, the ranking Democrat on the Senate's Energy and Water Development Appropriations subcommittee, which allocates DOE's budget.

Reid was not available for comment Friday.

"The plans to move it have nothing to do with science," Mello said.

He may be in good company with that argument.

A massive environmental impact statement prepared in 1996 by the DOE on the entire Stockpile Stewardship program — the program for science-based testing of the country's nuclear stockpile without detonation — included a look at the Atlas project, which was then just an idea. According to that study, "DOE considered, but dismissed as unreasonable" the possibility of building Atlas anywhere but Los Alamos, because the lab already had similar machines.

"Although it would be possible to duplicate this special equipment elsewhere, DOE considers this to be an unreasonably expensive option," the study said.

## Nevada move questioned

So why move Atlas now?

According to NNSA spokesman Morgan, the agency wants to cash in on the historic "coming together" that the nation's weapons labs have at the Nevada Test Site. The site is not connected to any particular lab and would promote cooperation among scientists throughout DOE, he said.

Morgan also said that when the project was first proposed, scientists thought they would need special electrical generating equipment to run Atlas. Once the machine was up and running, Morgan said, they realized Atlas could operate with electricity off the commercial power grid, which made it possible to locate Atlas anywhere, Morgan said.

Sen. Pete Domenici, R-N.M. — the Senate Budget Committee chairman — is among those who oppose moving Atlas. Domenici spokesman Chris Gallegos said moving Atlas had little to do with scientific cooperation, but was "part of the negotiations" of getting the 2001 budget bill through Congress.

"In order to get the consensus behind the law, that's the deal that was struck," Gallegos said.

Asked whether the senator thought moving Atlas was a waste of money, Gallegos said, "We do not disagree. We're certainly not completely pleased."

## Uses questioned

Derek Scammell, a spokesman for the Department of Energy's Nevada office, thinks February's audit will neither pull the plug on Atlas nor quash the plans to move the machine to Nevada.

"That's the (investigator General's) input," Scammell said. "We hope to move it next fiscal year."

Mello contends that Atlas can be used for more than the Stockpile Stewardship program. He said that while the machine's ostensible justification is to test existing nuclear weapons without actually detonating any bombs — the United States has a moratorium on nuclear testing — the machine also could be used to develop new weapons, which may violate an international nuclear nonproliferation treaty.

"I'm relatively confident that these experiments have an mind the so-called fourth generation of nuclear weapons," he said.

The lab has repeatedly denied such claims in the past.

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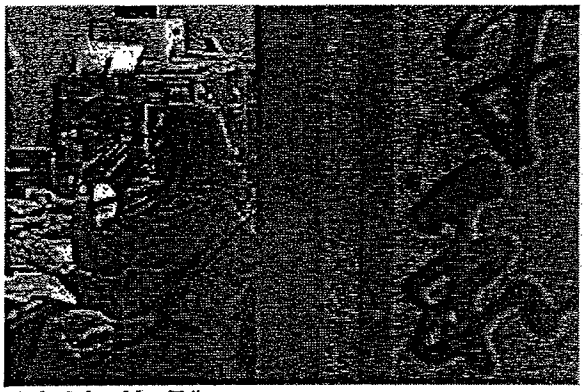
# Dropping bombs on Los Alamos

**With billboards, studies and a new campaign to foil recruitment, tiny nonprofit takes aim at the national lab**



Chris Schneider/Tribune

Greg Mello and Trish Williams-Neusch of the Los Alamos Study Group look over budget numbers for a project designed to discourage people from going into nuclear weapons work. The study group, an anti-nuclear weapons organization based in Santa Fe, has become one of the most vocal opponents of work done at Los Alamos National Laboratory.

By Lawrence Spohn
**Tribune reporter**

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It is the birthplace of nuclear weapons and still the world's premier nuclear weapons lab -- one of three administered by the Department of Energy.

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# Section--Metro & New Mexico Edition--Final Date--03/20/2001 Page--B1

## Need for $49 Million Machine Questioned

**Jennifer McKee Journal Northern Bureau**

SANTA FE Just two months after the Department of Energy unveiled a $49 million machine at Los Alamos and as it prepares to spend another $12 million moving it to Nevada a DOE investigation released last month questions whether the machine is necessary.

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The Inspector General's audit questioned just how valuable Atlas is to the DOE.

"If Atlas was important enough to build," the audit says, "then it should have received enough priority ranking to allow it to operate."

A spokesman for the National Nuclear Security Administration, the semi-autonomous arm of the DOE that oversees parts of the weapons labs, said the agency disagrees with the report.

"The people that are involved in project management see (Atlas) as an important tool," said Darwin Morgan, an NNSA spokesman.

Some outside the lab, however, praised the report.

Greg Mello of the Los Alamos Study Group, a Santa Fe watchdog organization, called it "a small measure of truth bubbling up to the surface."

Moving Atlas to Nevada when the machine has been completed for only a few months at Los Alamos is a waste of money, Mello said.

# Group Plans Weekly Prayer Vigils at Lab

## Co-Leader Says Events Will Begin Thursday

3/27/01

By Jennifer McKee
*Journal Staff Writer*

A group of activists and religious people who said they want to connect with Los Alamos National Lab workers as "fellow human beings" are planning silent prayer vigils in a parking lot in the center of the weapons lab every week starting Thursday.

The group will also pass out fliers in front of several lab buildings questioning nuclear weapons research, said Greg Mello, of the Los Alamos Study Group, a co-organizer of the prayer movement. Harold Wheat, an intern from the Methodist Church, is another organizer.

Every Thursday morning at 6 a.m., the group will meet in the DeVargas Mall parking lot in Santa Fe, Mello said. They will carpool to the lab, and distribute their leaflets for 90 minutes in front of several lab buildings, including TA-55, where plutonium is handled. Mello said anyone is welcome.

After passing out fliers, the group will have breakfast in the lab cafeteria, possibly with lab workers, and then set up pillows and folding chairs in a parking lot near the Chemistry and Metallurgy Research building, roughly in the middle of the weapons lab, for several hours of quiet prayer.

They plan on hosting the vigils indefinitely.

"People may come with different motives or different perspectives," Mello said, "but we will all be united by a concern about an economy and policies directed at maximum violence and not at maximum dignity."

Mello said the events are not planned as rallies or protests.

"We will be sitting there in solidarity with the lab workers as fellow human beings," he said. "They are struggling with the same moral questions we are."

Lab spokesman James Rickman said the lab will accommodate the group as long as they want to come. As per lab policy, the group will be assigned a security guard to escort them, Rickman said. He said the lab respects and accommodates anyone's First Amendment right to assemble as long as the assembly is peaceful.

The study group has both distributed fliers and prayed on lab property before, Mello said, but only for a few days at a time. The group's current effort is its most aggressive.

"The heart of (the lab) embodies the contradiction and pain in our society," he said. "We have to come to grips with that."

Rickman said he's never heard any complaints about the prayers in the past, and some lab workers enjoy taking part.

"I think a lot of people don't even notice," Rickman said.

# 'Mininukes' Proposed as Deterrent to Small Aggressors

## Sandia Labs Boss Seeks 2-Tier Defense

BY JOHN J. LUMPKIN
*Journal Staff Writer*

The United States should develop a class of nuclear weapons geared toward deterring small aggressors with big ideas, Sandia National Laboratories director C. Paul Robinson told weapons experts Tuesday.

Robinson, seeking ways for the nation's nuclear weapons complex to remain relevant in the post-Cold War world, outlined a two-tiered capability he urged the United States to develop. His comments came at the Nuclear Security Decisionmakers' Forum being held this week in Albuquerque.

The first is continuing the capability of the Cold War — many long-range nuclear weapons that balance U.S. forces with "the only nation in the world that can threaten the actual existence of the United States" — Russia.

The second, however, would be new.

Robinson proposed a class of small, relatively low-yield nukes that would be satellite-guided and therefore extremely accurate. Current nuclear weapons avoid satellite guidance and other complex systems, as the electromagnetic pulses in the opening stages of a nuclear war would disable most sensitive electronics on Earth and in orbit.

But these new weapons would be used to deter the Irans, Iraqs and North Koreas of the world, because they would enable the United States to kill those countries' leadership and military without killing a lot of civilians, Robinson said.

These weapons would prevent these countries from using any of their own weapons of mass destruction, including chemical and biological weapons, he said.

"The highest goal is to deter aggression," he said.

Robinson and others have come out in support of "mininukes" before. But earlier pitches had not framed those weapons as a way to prevent war.

In an aside, he said China could conceivably build up its nuclear forces to approach those of Russia and the United States. The U.S. missile defense program, backed by the Bush administration, could incite such a buildup, as China would build more nukes to overcome any defenses, he said.

Robinson had some dissenters at Tuesday's forum, which drew lab officials, contractors and arms-control activists. One speaker told Robinson he didn't believe that any nuclear weapon could be used on underground bunkers without massive collateral damage.

Robinson's comments about the role of nuclear weapons in the emerging world situation struck a sharp contrast to the familiar set of laments pronounced by other speakers at the forum.

Morale at the labs is low; talented, experienced scientists are retiring and being replaced with those who have not taken part in actual nuclear tests; and not enough funding is being put into infrastructure and weapons maintenance, speakers said.

They repeatedly hailed Sen. Pete Domenici, R-N.M., for his efforts to secure $500 million for infrastructure improvements at the national labs and weapons plants.

3/29/01

# THE BATTLE OVER THE 'MONSTER LASER'

*Livermore's multibillion-dollar* **National Ignition Facility,** *a huge fusion reactor, was supposed to be the answer to testing U.S. nuclear weapons, now that blowing them up is banned. But the project has intense critics, particularly here in New Mexico. The issue now is coming to a head.*

**By Lawrence Spohn**

A quiet war over the nation's biggest and most controversial science project, the giant, $3.6 billion National Ignition Facility fusion laser, moves back into the open battlefield this week in Washington.

The project, several years late and a couple of billion dollars over budget — depending on who's counting — is under construction at Lawrence Livermore National Laboratory, east of San Francisco.

With a critical Department of Energy report on NIF's future due to Congress on Friday, the hefty laser was also being challenged this week in a federal court hearing in the capital.

It undoubtedly will be a hot topic of conversation as well this week in Albuquerque, at the Nuclear Weapons and Materials Monitor's Second Annual Nuclear Security Decision-makers' Forum at the Hyatt Regency Hotel.

Many of the top officials, scientists and lab directors involved in debating the project's worth — including from New Mexico's Sandia and Los Alamos national laboratories — are expected to attend the four-day forum, which begins today and explores a range of nuclear-weapons issues.

And around the world, Hoya, the Japanese lens company responsible for making half the special glass needed in NIF, suspended shipments to Livermore this month and is reassessing its role in the project.

The project is getting heat from some Japanese critics and officials, who see NIF as a facility for continuing the development of nuclear weapons, a highly sensitive issue to the Japanese, whose industrial centers of Hiroshima and Nagasaki were decimated by nuclear bombs toward the end of World War II.

In short, NIF's mission is to generate tiny thermonuclear bomb blasts in the laboratory. Using the force of laser beams from every direction, it aims to compress a fusion fuel pellet to generate fusion-energy bursts.

The DOE and its nuclear weapons labs see NIF as critical in replacing the traditional tool of testing — underground nuclear bomb explosions, now banned.

Critics, like Greg Mello of the Los Alamos Study Group in Santa Fe, see NIF as a design tool for the next generation of nuclear bombs.

Longtime NIF critic Leo Mascheroni, an independent Los Alamos fusion physicist, insists that "NIF will not work," that it actually represents a threat to U.S. national security and that it has been a costly diversion in the 50-year quest for a fusion energy power plant.

Concerned that the United States will be forced to return to nuclear testing when NIF fails, Mascheroni continues to push for a head-to-head, independent and open scientific showdown among NIF, his proposed hydrogen-fluoride laser alternative and any other alternatives.

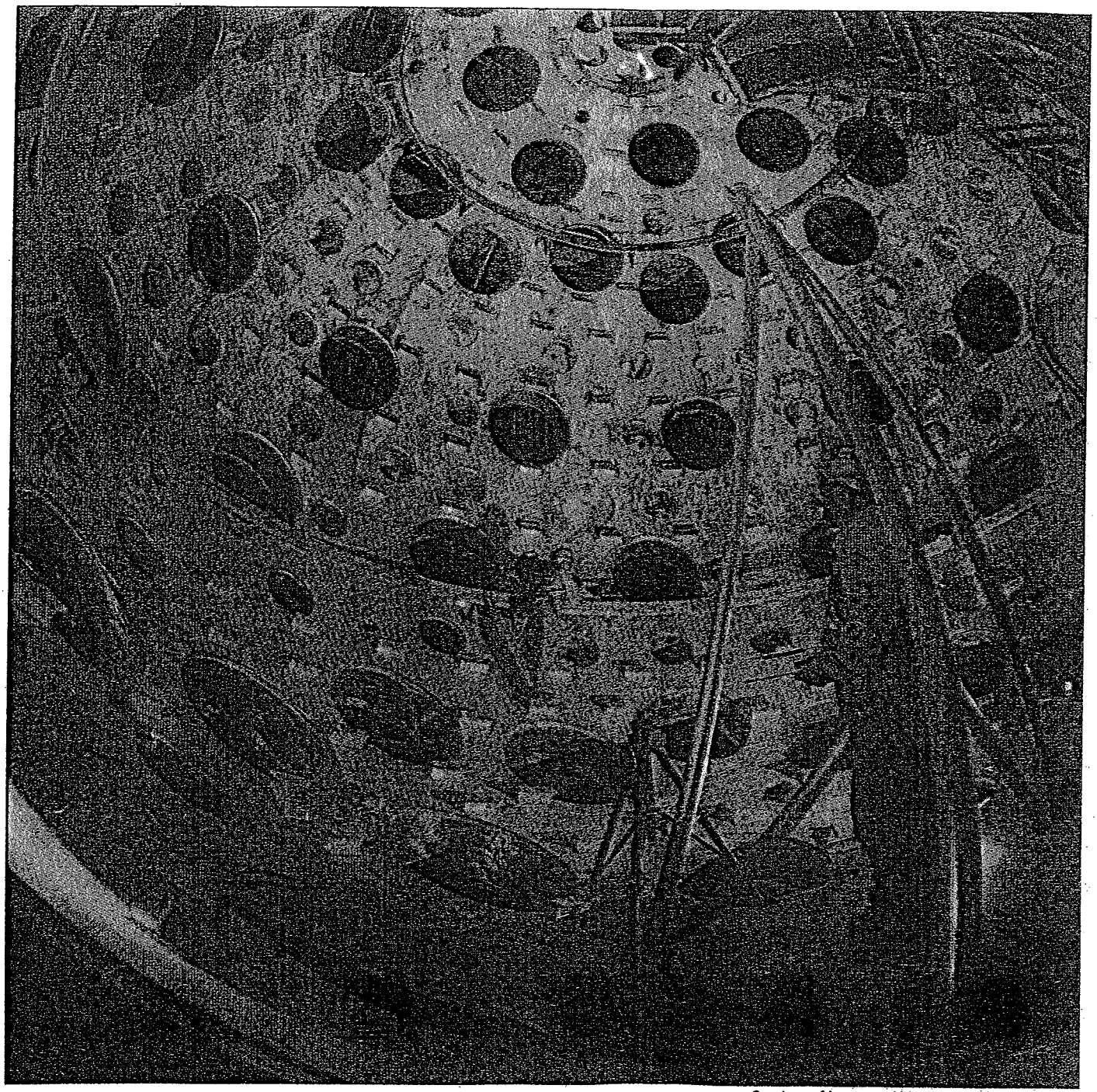
"What are they afraid of?" he asks, insisting officials have routinely deceived Congress. As recently as last month, he says, he was rebuffed by top DOE officials during a visit to DOE headquarters, though he believes he made headway in visits to key congressional committees.

The United States currently has a moratorium on nuclear testing, but the Senate two years ago rejected the Comprehensive Test Ban Treaty, which has been approved by dozens of nations, including Japan.

For years, the NIF battle lines have been drawn, with proponents and opponents squaring off over whether NIF is needed, whether it is cost-effective, and whether it is even technically capable of achieving its mission of fusion ignition and studying the most detailed energy outputs of hydrogen bombs.

How the coming battle plays out at the Department of Energy, in Congress and in the federal courts will have a substantial impact on the nation's entire nuclear weapons program and potentially on the budgets of Los Alamos and Sandia.

Both of the state's U.S. senators, Republican Pete Domenici, the powerful chairman of the Senate Budget Committee, and



Courtesy of Lawrence Livermore National Laboratory

**Two workers stand inside the laser target chamber of the controversial National Ignition Facility at Lawrence Livermore National Laboratory in Livermore, California. The $3.6 billion laser project is behind schedule and over budget.**

## NIF NUMBERS

The National Ignition Facility is a nuclear bomb blast simulator.

It would use the energy output from a neodymium glass laser to heat and compress a tiny hydrogen-fuel pellet until it reaches temperatures and pressures sufficient to ignite and produce fusion energy — the power of the sun and thermonuclear bombs.

In fusion, the opposite of fission — which drives today's nuclear power plants — lighter elements such as hydrogen or helium are fused into heavier ones, releasing energy.

To attempt this, the complex NIF would:

- Be the world's most powerful laser, generating peak, though momentary, power pulses 1,000 times the electric generating power of the entire U.S.;
- Be more than two football fields long, occupying the total space of a typical football stadium;
- Have a complex architecture in which 192 individual laser beams are focused on a point or target;
- Require a sealed target chamber 30 feet wide, weighing 1 million pounds;
- See brief temperatures of up to 100 million degrees;
- Need thousands of high-tech components, tons of unique glass and some 37,500 optical elements;
- Be at least $2 billion over budget and more than 24 months behind schedule;
- Have 10 major partners, including New Mexico's Sandia and Los Alamos National Laboratories, the Naval Research Lab, and the U.S. Army and Air Force.

## TODAY'S BYLINE

Spohn is assistant editor of The Tribune's Insight & Opinion section and longtime senior Tribune science writer.

## TAP IN

To comment to The Tribune on this topic, **please write:** Letters to the editor, The Albuquerque Tribune, P.O. Drawer T, Albuquerque, NM 87103. **Fax us** at 823-3689. **E-mail us** at: letters@abqtrib.com.

Democrat Jeff Bingaman, ranking minority member of the Senate Committee on Energy and Natural Resources, are expected to play prominent roles as various pro-NIF and anti-NIF factions maneuver this year.

Mascheroni, a former Los Alamos employee who has spent nearly 15 years in the fusion front line fighting NIF and promoting his alternative with extensive technical arguments, says, "This is it. This is the big battle for NIF."

At issue is whether to continue building the monster laser at full throttle, substantially alter NIF's marching orders by slashing its budget and reducing its objectives, or possibly discharge it all together, as Congress did with DOE's last big science fiasco, the Superconducting Super Collider.

Already, NIF has forced Congress, with Domenici leading the way, to repeatedly supplement DOE's defense programs budget to keep the ever-bloating NIF from completely overwhelming the rest of the nuclear weapons program.

Los Alamos, Sandia and Livermore are the nation's three nuclear weapons labs, whose mission has shifted since the Cold War from designing and engineering new nuclear warheads to maintaining the nation's nuclear arsenal through DOE's science-based Stockpile Stewardship and Maintenance Program.

Each has a billion-dollar-plus annual budget, and each has significant pieces of the stockpile stewardship puzzle. Although all three weapons labs directors officially supported NIF in a "white paper," several of their own nuclear weapons scientists have raised serious technical and fiscal concerns about the project.

Last year, when Sandia officials openly criticized NIF and suggested reducing its design and cost to protect other nuclear weapons program components, they were promptly chastised by then-Secretary of Energy Bill Richardson, a New Mexican expected to run for governor.

Richardson, who originally was outraged when NIF's cost overruns and delays became known two years ago, later surprised New Mexico interests when he became one of NIF's most ardent supporters, insisting it remains crucial to maintaining the nation's nuclear weapons arsenal.

NIF was a prominent topic at last year's nuclear weapons forum, also in Albuquerque. At it, Sandia President C. Paul Robinson openly slammed NIF, perhaps setting the stage for the confrontation with Richardson.

Asked then why Sandia was not pushing its highly successful Z-accelerator fusion technology as a far cheaper alternative to NIF, Robinson confessed Congress "would never believe the second liar."

Several senators last year fired shots across Livermore's bow over NIF, and critics — from anti-nuclear groups to tax accountability organizations — are pressing Congress more than ever to blow taps for the troubled project.

On Saturday, the DOE is to send Congress a mandated report on NIF's status, including: a certification that it can get the

*Please see* **LASER/C4**

**LASER** *from C1*

project back on track; reassurances that NIF can achieve its technical promises; and an assessment of NIF alternatives, such as slashing its design from 192 beams to 48 or even a single module of eight beams.

The project, which rose out of the DOE's still partly classified military — or "inertial confinement" — fusion program, has become far more than a nuclear weapons plum. It is seen as having significant implications for all science, for future research funding and even for Livermore's prestige and life.

Critic Marylia Kelly, of the Livermore watchdog group Tri-Valley Cares, believes NIF is "tarnishing" all science with overblown promises.

Others have argued that Livermore and the DOE are clinging to NIF at all costs, because without it, Livermore's mission — as the third nuclear weapons lab with declining responsibility for existing warheads — becomes highly questionable.

"A lot is riding on this," says nuclear weapons program analyst Christopher Paine, of the Natural Resources Defense Council in Washington, D.C.

The council has a pending lawsuit against the DOE that returned to the U.S. District Court in Washington this week. It seeks to bar the DOE from using two expert reports in justifying NIF to Congress.

The council and associated groups, such as Kelly's and the Los Alamos Study Group, argue both NIF review panels violated the public aspects of the Federal Advisory Committee Act and were fundamentally biased.

"Once again, and there is history of this, they were loaded with paid outside Livermore consultants," according to Paine. "You couldn't expect them to be objective, and Congress needs to see that."

But even in the procedural aspects mandated by the act, Kelly says, "DOE has not complied with any aspect," refusing to allow even public involvement or overview.

Paine and Kelly believe the DOE's report to Congress is predictable.

"I don't think there is any give," says Paine. "They are going full bore.

"So are we," he adds, saying that a favorable court ruling helps, but ultimately the battle will be won or lost in Congress.

Mascheroni agrees, saying Congress needs to hold "a full-blown hearing" on NIF to obtain independent expert perspectives.

Then, he reasons, it should order the National Academy of Sciences to conduct a chartered, open, fair and comprehensive review, not only of NIF but of the entire military fusion program and the best technical alternatives for the taxpayers dollar.

Livermore and DOE officials have repeatedly said that NIF, while troubled, has survived numerous and continuing scientific and technical reviews that warrant its full support and continuation.

DOE officials declined to discuss specifics of the upcoming NIF report. But they say it will comply with all congressional requirements, including assessing various permutations of NIF and other technical alternatives. They insist it has not been produced in violation of the Federal Advisory Committee Act.

Headquarters, however, is concerned about the implications of Hoya backing out of the NIF glass contract, although a quick analysis suggests other vendors, using the same techniques, could fill the void. Reportedly, one-third of the unique glass NIF needs already has been delivered to Livermore.

A Government Accounting Office report last year was highly critical of NIF, and that agency reportedly is doing a follow-up report which it intends to submit to Congress shortly.

Despite congressional efforts to revamp DOE defense programs and get straight answers about NIF, Kelly predicts the DOE's new National Nuclear Security Agency will send Congress a report "repeating all the sins of the past."

"I expect a whitewash," she says. "Unless Congress is prepared to turn over the national treasury to Livermore, NIF must die."

Paper: Pittsburgh Post-Gazette (PA)
Title: BATTLE OVER HUGE FUSION LASER HEATING UP ON SEVERAL FRONTS
Author: LAWRENCE SPOHN, SCRIPPS HOWARD NEWS SERVICE
Date: April 2, 2001
Section: SCIENCE, TECHNOLOGY AND MEDICINE
Page: A-7

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Author: LAWRENCE SPOHN, SCRIPPS HOWARD NEWS SERVICE
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Page: A-7

# Proposed Budget Protested

## Domenici Vows To Up Lab Funds

4/10/01

By Jennifer McKee
*Journal Staff Writer*

The White House's proposed federal budget ignited both head scratching and criticism in northern New Mexico on Monday as officials and activists waded through the tome to see what President Bush wants to spend on federal projects here.

"The budget request is wholly inadequate," said Sen. Pete Domenici, R-N.M., referring to a cut in funding for plutonium pits at Los Alamos National Laboratory. "Quite frankly, I'll work to see that it does not stand. It simply does not come close to supporting the requirements for pit production and certification work at LANL."

**More or less**

President Bush's $1.96 trillion federal budget proposal has some positives and negatives for New Mexico
**A1, A6**

Domenici estimated the program needs another $150 million above the Bush administration's proposal.

Bush sent his $1.96 trillion budget spending plan to Congress on Monday. The document outlines his administration's proposed spending for every federal agency. In northern New Mexico, that means funding for everything from the Santa Fe Indian School to Los Alamos lab.

The document is far from written in stone. Both houses of Congress will likely produce compromise budget resolutions after the spring recess.

Nonetheless, Bush's plan attracted much attention in northern New Mexico.

On the less contentious side, the plan calls for $4.5 million for the Institute of American Indian Arts in Santa Fe, $375,000 more than last year. The plan also allocates money to purchase 860 acres on the Taos

# Budget Draws Protests

*from* **PAGE 1**

Valley Overlook as part of the Bureau of Land Management's $4 million Land Acquisition Program.

It slates $23.2 million for the first phase of rebuilding the Santa Fe Indian School, a boarding and day school for about 1,000 Native American students run by the Bureau of Indian Affairs. The plan also calls for transferring the existing school — a smattering of historic adobe buildings on Cerrillos Road — to the 19 Pueblos of New Mexico, according to Hal Schultz, assistant superintendent of the Indian school.

An independent study finished last spring showed that fixing up the aging building would cost more than $50 million, while building the campus anew would cost roughly $38 million.

Bush's proposed spending for the school falls far short of that, but according to Domenici, this is only the first phase of rebuilding.

"We've built plenty of schools for this kind of money and they're pretty good schools," said Nedra Darling, a BIA spokeswoman.

Perhaps the most heated part of the budget was the Department of Energy's roll-out.

New Mexico's senators attacked the proposal, which calls for an estimated $312 million less spending in New Mexico than last year and cuts at various programs throughout the agency.

Sen. Jeff Bingaman, D-N.M., said the budget "sends a very disturbing message about how the president views" the labs.

Domenici said the budget has "some serious deficiencies" and has already co-sponsored two amendments to the Senate budget resolution that would tack on an additional $900 million for DOE defense program spending and $469 million for science research at national labs.

The budget calls for little over $1.4 billion for Los Alamos lab, a decrease of $281 million from last year. That number may be deceiving. The budget also beefs up funding of the National Nuclear Security Administration by $281 million. The administration is a semiautonomous arm of the DOE that now oversees some work at the Los Alamos lab.

Lab spokesman John Gustafson said it's too early in the budget process and too soon after Bush's enormous budget volume was released to say exactly how the lab might end up financially next year.

"There's a long process ahead and it's too premature to speculate on any of that," he said.

Activists didn't hesitate.

According to Jay Coghlan of Nuclear Watch of New Mexico, the budget is long on weapons and short on environmental cleanup.

"It's basically a budget for the weaponeers of Los Alamos," he said, pointing out that DOE calls for spending an extra $230 million for weapons with almost half of that to be spent at Los Alamos, while the lab's environmental cleanup budget was cut by $15 million to just over $75 million. In explaining the cut, the DOE's budget reads, the "net decrease reflects a shift toward higher priority activities."

"To me. that's weapons," Coghlan said.

Joni Arends, waste program manager for Concerned Citizens for Nuclear Safety, also zeroed in on the cleanup cuts.

"For every dollar increase in stockpile stewardship, there should be a similar dollar for cleanup," she said. "What is national security if we don't have our health."

Similarly, Greg Mello of the Los Alamos Study Group said the budget focuses sharply on weapons.

"More weapons, less science," he said.

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# Watchdog group has its eye on Los Alamos lab

April 11, 2001 Pojoaque Valley Edition

Jane E. Phillips/The New Mexican

**Greg Mello, left, executive drector of the Los Alamos Study Group, speaks with board member David Bacon on Friday.**

**By KATE FERLIC**
The New Mexican

It's a David-and-Goliath struggle: The Los Alamos Study Group, a nonprofit organization dedicated to the goal of nuclear disarmament, facing off against the Los Alamos National Laboratory, the world's leading nuclear-weapons lab.

In terms of resources, LASG is engaged in an uphill battle. Housed in a three-room office on Marcy Street in Santa Fe, LASG has two full-time employees, a handful of part-time volunteers and four contract personnel to do analysis work.

Thirty-five miles north on 27,800 acres of land, LANL boasts nearly 10,000 employees contained in about 2000 buildings.

LANL has an intimidating annual $1.739 billion budget compared to LASG's $150,000.

Despite the odds, LASG continues slinging shots at the labs via awareness campaigns and distributing alarming information about the environmental, cultural and economic dangers of continuing to develop nuclear weapons.

In New Mexico are LANL, Sandia National Laboratories and Kirtland Air Force Base, one of the nation's biggest nuclear-weapons storage depots.

According to the Department of Energy's fiscal year 2001 budget request, federal spending on nuclear-weapons research, development and production in New Mexico exceeds $2.5 billion.

Based in Santa Fe, LASG's proximity to these sites serves the organization's goal to play the role of " watchdog" for LANL's

Please see **WATCHDOG**, Page 4

# WATCHDOG

Continued from Page 1

nuclear activities. Called the "thinking antinuke group" on the Hill, LASG works to obtain hard and fast statistics about detrimental effects nuclear weapons have on the environment and society.

"Nuclear weapons are a metaphor that integrates a lot of destructive trends in our society," Greg Mello said. "They embody and represent a great deal of violence and help legitimize lesser forms of violence."

LASG also works to expose LANL projects to the public, such as the lab's ongoing Appaloosa project, a weapons test in a steel vessel that mimics a fission explosion. LANL's waste dumping provides yet another ground for attack. "Dumping is a permanent consumption of land," Mello said. "The safety over the long run is unknown."

Mello identified the organization's short-term goal as improving the quality of awareness on a day-to-day basis. For the future, however, LASG hopes to help facilitate a large declines in nuclear-weapons arsenals, as well as stopping the development of newer weapons. Ultimately, Mello said the organization would like to see the United States sign the United Nation's Comprehensive Test Ban Treaty.

The treaty obligates nations to stop nuclear testing, the stockpiling of weapons and the development of new nuclear weapons.

Mello emphasized his think-globally, act-locally mentality. "Community awareness alone will be politically powerful," he said. "We always have social transformation in mind."

Born from an ad hoc group of about 25 people, LASG formed to help heal some of the scars the Atomic Age left on American culture. "We all wanted an end to the madness we had grown up with," Mello said. "People my age needed to be free of the shadow of the mushroom cloud and the nihilism that came along with it."

The organization recently bought six billboards in Northern New Mexico at $4,000 a month, intending to promote its anti-nuke message. One billboard on Interstate 25 at Algodones reads, "New Mexico: #1 in nuclear weapons, #1 in poverty, Coincidence?"

The billboard points out the fact that while New Mexico receives the largest federal funding per capita because of the lab, the state slouches at the bottom in statistics including per capita income, education and health care.

Another billboard, showing a woman wearing a lab coat with the notorious atomic mushroom cloud behind, reads "Nuclear Science? A mind is a terrible thing to waste." The billboard is meant to deter young scientists from taking jobs at the lab.

Mello identifies this as one of LASG's main objectives. To dissuade young scientists from working on weapons of mass destruction, LASG members distribute leaflets outside of the laboratories.

In late February, LASG, along with other disarmament organizations, issued a public challenge to all scientists and engineers to take a stand against nuclear weapons by signing a pledge never to work on them.

As of Tuesday, LASG has 150 signatures.

On the afternoon of April 5, Mello juggled a slew of phone calls while reading incoming faxes with breaking news on a Bush administration's decision to increase nuclear spending.

Bush proposed to increase the Department of Energy's budget for the nuclear-weapons program by almost 5 percent, while cutting spending for environmental cleanup and nonproliferation work.

Sen. Pete Domenici, R-N.M., known in the LASG circle as the "patron saint of nuclear weapons of mass destruction," is poised to support an annual nuclear weapons budget of almost $6 billion. He is the chairman of the Energy and Water Appropriations Subcommittee and the chairman of the Senate Budget Committee.

On Monday, the Bush administration asked for $5.3 billion, but Mello suspects the Senate will bump up spending by $800 million for improvements in infrastructure for housing weapons.

With the Bush administration, LASG will be in overdrive, continuing to campaign for disarmament.

For anyone who would like to get involved in a nuclear-weapons debate, Mello recommends writing letters to the editor as an effective way to promote opinions. His call to arms, however, rests on the idea that "if we are really aware of an injustice, then we are obligated to act."

And if awareness spawns actions, inaction creates a lack of awareness, Mello explained.

"We aren't out there to change people's opinions. We want to work to pave the way for educated opinions, so that people can be politically effective and socially transformative."

For more information on LASG, go to www.lasg.org.

THE ALBUQUERQUE TRIBUNE



# Little bang theory

## *'Low-yield' nuclear weapons might help deter attacks from rogue nations, but they require new strategic thinking*

Courtesy Sandia National Laboratories

**A B-1B bomber drops a mock version of the B61-11 earth-penetrating nuclear warhead during a 1997 low-altitude "lay-down" test at Sandia's Tonopah Test Range in the Nevada desert. The bombing approach, in which the weapon detonation is delayed, allows the aircraft to escape the nuclear blast that aims to destroy underground bunkers.**

4/11/01

THE NUCLEAR DEBATE

**TODAY'S ARTICLE** is an abridged version of a paper and speech delivered by Robinson at the Nuclear Weapons Decisionmakers' Forum last month at the Hyatt Regency Hotel in Albuquerque.

Sponsored by the Nuclear Weapons and Materials Monitor — a newsletter that closely covers the nation's extensive nuclear weapons complex — the meeting was attended by some 200 of the country's top nuclear scientists and officials.

**ON THURSDAY,** The Tribune will publish a contrasting view to Robinson's by Greg Mello, executive director of the Los Alamos Study Group — an anti-nuclear watchdog group based in Santa Fe.

To comment, **write to us at** Letters to the editor, The Albuquerque Tribune, P.O. Drawer T, Albuquerque, N.M. 87103. **Our fax number is** 823-3689. **Our e-mail address is** letters@abqtrib.com.

By C. Paul Robinson

With every new presidential administration, a strategic review is usually held to recalibrate the content and direction of U.S. military strategy and policies. With the end of the Cold War in 1991, there was considerable confusion as to what our nation's nuclear posture should be.

There were many schools of thought as to what should happen with the large arsenal of nuclear weapons built up by both the United States and the former Soviet Union.

There was widespread agreement that substantial reductions could be achieved, and the START (Strategic Arms Reduction Treaties) process began to realize that goal. However, the process is currently paused at START II, which would set a limit of 3,000 to 3,500 deployed strategic warheads, with agreement of only a framework for a follow-on START III (2,000 to 2,500 warheads on deployed strategic launchers).

A strategy called "lead and hedge" became U.S. policy, in which the United States would attempt to lead the way to much smaller nuclear arsenals, as we sought to engage Russia and the other (nuclear) inheritor states in more positive international relations, while at the same time sustaining the option to rearm, should there be a revanchist movement within these states to raise the threat level against the United States.

## How many; how few?

Today, the U.S. and Russian strategic dialogue no longer focuses on the question of how many weapons are enough. But each has shifted to a more cautious stance in considering the flip side of the question, "How few are enough?" At the same time, tens of thousands of other nuclear weapons — the so-called "nonstrategic" devices intended for use in theater or tactical conflicts — remain outside of the START frameworks.

Consequently, the United States and Russia no longer appear to place nuclear arms limitations at the top of their priority lists, more than likely because of an increasingly shared view that war between the two is far less likely than during the Cold War era. The U.S. national security adviser, Condi Rice, recently stated that "American security is threatened less by Russia's strength than by its weakness and incoherence." Each side now devotes more effort to seeking ways in which they might move to a new relationship as "strategic partners."

Russia has already begun to emphasize the importance of its arsenal of nuclear weapons to compensate for its limited conventional capabilities to deal with hostilities that appear to be increasing along its borders. It seems inescapable that the United States must carefully think through how we should be preparing to deal with new threats from other corners of the world, including the role that nuclear weapons might serve in deterring these threats from ever reaching actual aggressions.

## Nuclear weapons future

I personally see the abolition of nuclear weapons as an impractical dream in any foreseeable future. I came to this view from several directions. The first is the impossibility of ever "uninventing" or erasing from the human mind the knowledge of how to build such weapons. While the sudden appearance of a few tens of nuclear weapons causes only a small stir in a world where several thousands of such weapons already exist, their appearance in a world without nuclear weapons would produce huge effects.

The impact of the first two weapons in ending World War II should be a sufficient example. I believe that the words of Winston Churchill, as quoted by Margaret Thatcher to a special joint session of the U.S. Congress on February 20, 1985, remain convincing: "Be careful above all things not to let go of the atomic weapon until you are sure, and more sure than sure, that other means of preserving the peace are in your hands."

Similarly, it is my sincere view that the majority of the nations that have now acquired arsenals of nuclear weapons believe them to be such potent tools for deterring conflicts that they would never surrender them.

Against this backdrop, I recently began to worry that because there were few public statements by U.S. officials in reaffirming the unique role which nuclear weapons play in ensuring U.S. and world security, far too many people (including many in our own armed forces) were beginning to believe that perhaps nuclear weapons no longer had value.

It seemed to me that it was time for someone to step forward and articulate the other side of these issues for the public: first, that nuclear weapons remain of vital importance to the security of the United States and to our allies and friends today and for the near future; and second, that nuclear weapons will likely have an enduring role in preserving the peace and preventing world wars for the foreseeable future.

## Nuclear weapons role

The commander-in-chief of the Strategic Command, Admiral Rich Mies, succinctly reflected the current U.S. deterrent policy last year in testimony to the U.S. Senate:

"Deterrence of aggression is a cornerstone of our national security strategy, and strategic nuclear forces serve as the most visible and most important element of our commitment ... (further) deterrence of major military attack on the United States and its allies, particularly attacks involving weapons of mass destruction, remains our highest defense priority."

While the application of this policy seemed clear — perhaps we could have said even "straightforward," during the Cold War — application of that policy becomes more complicated if we consider applying it to any nation other than Russia.

Let me first stress that nuclear arms must never be thought of as a single "cure-all" for security concerns. For the past 20 years, only 10 percent of the U.S. defense budget has been spent on nuclear forces. The other 90 percent is for "war fighting" capabilities. Indeed, conflicts have continued to break out every few years in various regions of the globe, and these nonnuclear capabilities have been regularly employed.

By contrast, we have not used nuclear weapons in conflict since World War II. This is an important distinction for us to emphasize as an element of U.S. defense policy, and one not well understood by the public at large.

Nuclear weapons must never be considered as war fighting tools. Rather we should rely on the catastrophic nature of nuclear weapons to achieve war

*Please see* **BANG/C3**

**TODAY'S BYLINE**

**C. Paul Robinson** is president of Sandia National Laboratories, one of three U.S. nuclear weapons labs.

He formerly directed the nuclear weapons program at Los Alamos National Laboratory and also served as an arms control adviser and as the U.S. ambassador to the Joint Verification Experiment.

In the 1988 JVE, the United States and the former Soviet Union observed the detonation of nuclear warheads at each other's test sites for treaty enforcement purposes. That experiment paved the way for Senate ratification of the Threshold Test Ban Treaty and the Peaceful Nuclear Explosion Treaty.

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**BANG** *from C1*

prevention, to prevent a conflict from escalating (to the use of weapons of mass destruction), or to help achieve war termination when it cannot be achieved by other means, if the enemy has already escalated the conflict through the use of weapons of mass destruction.

Conventional armaments and forces will remain the backbone of U.S. defense forces, but the inherent threat to escalate to nuclear use can help to prevent conflicts from ever starting, can prevent their escalation, as well as bring these conflicts to a swift and certain end.

In contrast to the situation facing Russia, I believe we cannot place an over-reliance on nuclear weapons, but that we must maintain adequate conventional capabilities to manage regional conflicts in any part of the world. Noting that the United States has always considered nuclear weapons as "weapons of last resort," we need to give constant attention to improving conventional munitions in order to raise the threshold for which we would ever consider nuclear use. It is just as important for our policymakers to understand these interfaces as it is for our commanders.

## An enduring strategic tool

Let me then state my most important conclusion directly: I believe nuclear weapons must have an abiding place in the international scene for the foreseeable future. I believe that the world, in fact, would become more dangerous, not less dangerous, were U.S. nuclear weapons to be absent.

The most important role for our nuclear weapons is to serve as a "sobering force," one that can cap the level of destruction of military conflicts and thus force all sides to come to their senses.

Nuclear deterrence becomes in my view a "countervailing" force and, in fact, a potent antidote to military aggression on the part of nations. But to succeed in harnessing this power, effective nuclear weapons strategies and policies are necessary ingredients to help shape and maintain a stable and peaceful world.

What I propose is still quite skeletal in nature, but it appears to have some advantageous characteristics that can provide a new approach on the way to creating a comprehensive, post-Cold War nuclear weapons policy.

## Central deterrence: 'CapOne'

In introducing this framework, I would begin with one critically important observation: Russia today is the only nation that we can conceive of with the potential to threaten the U.S. national existence. It would be exceedingly foolish to allow our deterrent forces against Russia to weaken as long as that potential exists.

Therefore, in the near term (say 10 years or so) our major plans and force decisions will continue to be based on hedging against Russia. The strategy and policy for continuing to deter Russia follows closely that which we developed during the Cold War.

The current war-planning approach (known as the SIOP, for Single Integrated Operational Plan) and its configuration of forces have been in transition somewhat in recent years, but are in surprisingly good shape. We would continue to focus on treaty-limited strategic weapons in configurations that lead to stability against surprise attacks.

Our future arms control efforts with Russia must endeavor to somehow take account of the total nuclear arsenals of each side, not just those within the START framework. Each side will want to evaluate carefully its needs for nuclear forces beyond the mutual deterrence purposes and seek ways to harmonize its forces.

As long as there are large destructive forces in being, I believe that the deterrent policy and the force structure created during the Cold War cannot be abandoned entirely. One can imagine a continuum of nuclear weapons capabilities which at the high end could be used to deter Russia and at the low end could be adapted to deter other states. How the future unfolds, particularly with respect to theater nuclear planning, will determine whether and how such a policy and its accompanying capabilities would change over time.

I expect the U.S.-Russia relationship will change only slowly, although a warming would be welcomed, perhaps making it possible someday to eliminate the need for the high end of our nuclear arsenal. That is provided of course that another potentially powerful nation — such as China — does not arise to take Russia's place. I will designate this capability as Capability One or "CapOne" — which might also be thought of in the context of deterring China as well.

## 'To whom it may concern'

But I believe that nuclear weapons do have a place and purpose today in other than a Russian or Chinese context. Rather than inflame debates

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prematurely as to who is or may become America's enemies or adversaries, I would call the second force capability the "Non-Russian Force," or simply "CapTwo." In my early thinking on this subject, I even referred to this second force as the "To Whom It May Concern Force."

The whole question of, "Against whom would we really contemplate the use of nuclear weapons?" is an important political and international issue. A direct response might well be "Any nation or targetable sub-national entity that, if not otherwise deterred, might be tempted to employ nuclear weapons, or other weapons of mass destruction, against the United States, our forces, or our allies."

We have adopted policies to discourage the proliferation of nuclear, chemical, and biological weapons. We have also urged the acceptance of treaties that would globally ban both biological and chemical weapons, even though progress has been agonizingly slow in achieving complete elimination of such weapons.

In several crises, U.S. presidents have warned other nations that "unspeakable destruction" would be the result should they resort to attacks on the United States or its allies with such "weapons of mass destruction."

Although the United States has been careful not to suggest that such retaliations would inevitably mean we would use nuclear weapons, we have left open the possibility for aggressor states to conclude for themselves that perhaps we might indeed use such weapons. We have certainly wanted adversaries to think hard about this possibility.

Unfortunately, we cannot enjoy the ambiguity of such declarations forever, even though the decision to seriously consider nuclear retaliation for use of less than nuclear weapons would carry a heavy burden of demonstrating "proportionality."

I believe we face an even greater difficulty if we look at how we have been going about planning for potential Theater Nuclear Options (or TNOs). There has been no clear policy in place — I can even say there has been a lack of clear thinking in place — regarding "limited nuclear attacks." We have been reduced to contemplating within each potential theater, the particular targets that should be held at risk and then analyzing appropriate options for attacking them with various nuclear or conventional weapons systems.

But, without a well-understood and well-justified policy in place, the development of TNOs is of limited value and might even appear to be "nuclear war fighting." I believe that our policy in these cases should emulate our Cold War policies; that is, it should focus first on deterrence of conflict, escalation control and war prevention, and contemplate nuclear attacks only if deterrence should fail.

## Civilian concerns

Among the fundamentals of a policy, the United States should reemphasize the principle it has embraced for most of the Cold War, namely that we will never directly or systematically target civilians. This principle has been a foundation of our Russian deterrence policy as well, although far too few are even aware of it.

I believe I am safe in asserting that in considering nuclear deterrence in a non-Russian context, collateral damage issues will be of even greater importance than ever before. These issues must be better understood in contemplating nuclear attacks against a North Korea, an Iran, an Iraq, or even a China.

The fact that civilians in these nations have no voice in developing the policies of their government would make their slaughter abhorrent to Americans, as it would be to any well-meaning peoples of the world. However, targeting the

*Please see* **BANG/C4**

**BANG** *from C3*

leadership, along with military forces and military capabilities — the very tools of aggression — are the appropriate primary targets that should be held at risk under any U.S. deterrent policy.

In examining the characteristics of post-Cold War deterrence, it appears important to make our policy and plans both country and leadership specific. At the same time, we should appropriately keep our thoughts confidential regarding whom or how. If and when a future conflict first begins to unfold, that will be the time for us to communicate — directly, but perhaps still not publicly — what it is that we do not want them to do, that is what we are trying to deter. That will also be when we communicate our capabilities to hold at risk what they value and to protect what we value.

While we should remain ambiguous about the details of what our specific responses to their acts of aggression would be, we must make abundantly clear that our actions would have terrible consequences for them.

Finally, the most important foundation for our policies and actions, and the most important part of our communications to the other side in an impending crisis must be that we have the national will, as well as the means, to carry out our policy.

Adopting such a policy will place enormous challenges before the U.S. intelligence community — to provide the same detailed level of understanding about potential aggressors as was determined for the former Soviet Union during the Cold War. This understanding must include elements of their culture, their values, their leadership, as well as operational data regarding strategic target coordinates and characteristics.

## U.S. declarations of intent

I believe it will be important to make a part of our declaratory policy that the United States' ultimate intent, should it ever have to unleash a nuclear attack against any aggressor, would be to threaten the survival of the regime leading that state. I do not mean that the aggressor state would cease to exist as a nation, but that governance under the existing national government could no longer be tolerated. Unless that state's leaders are deterred from the acts we are seeking to deter, our war aims would be too destroy that leadership.

The most difficult issue may be the question of whether or not the United States would attack a nation with nuclear arms, if that nation possessed biological or chemical weapons but did not possess nuclear arms at the time and was not allied to a nation that had nuclear weapons. We have some historical examples, and it is imperative that the United States must avoid being viewed as a "global hegemone."

In spite of growing international pressures, we have attempted to prevent our hands from being tied by such a constraint — preferring to have the policy appear in executive orders and declaratory policies that could be changed, rather than allowing treaty provisions to govern this issue. I believe this is the right course of action. Those who would advocate that we should not be allowed to consider deterring chemical or biological attacks with our nuclear arsenal must first show how such attacks might be deterred by other means.

## 'CapTwo' force

In some past conflicts, such as the bombing strike against Libya, and during the planning stages of other contemplated attacks, overflight of noncombatant nations, by bombers or cruise missiles, was a major consideration in determining whether or how to undertake such attacks. Penetration of the air space of a sovereign nation with bombers or cruise missiles would be a violation of international law, as would be the reentry of a ballistic warhead through such air space.

Such concerns would multiply considerably, if we should contemplate nuclear deterrence in a (broader) non-Russian context. For example, if our craft or missiles had to fly near or through Russian borders, Russia might well believe that the United States was attacking them, and a retaliatory response could be triggered. Thus, it would appear that ballistic missiles may be of lesser utility in the second capability of our forces, if these would have to transit Russia in flying enroute to targets in the nations of concern.

Of course, if future missiles can have greatly increased ranges, allowing them to fly over the South Pole or at other polar angles, the difficulty of avoiding Russian overflight paths would be alleviated. Ballistic and cruise missile-carrying submarines inherently provide some relief against these overflight problems, but their patrol areas would have to be altered from what is currently the case. It should also be noted that while it is theoretically possible to reach any target on earth with manned bombers, very significant tanker support would be required in many parts of the globe.

Next, outside of some number of targets in China, there is little real utility or need in having any Multiple Independent Reentry Vehicle missiles in CapTwo. I think we must contemplate placing some number of singlet reentry vehicles carrying low-yield weapons on submarine-launched missiles. These, along with cruise missiles from both bombers and submarines, are likely to be the most important weapons in CapTwo because they also allow us to have "forward-basing" in a crisis, again without encountering major overflight difficulties.

In a somewhat obvious way, aside from the still perplexing issues of how to hold at risk hardened or deeply buried underground targets, I believe that we would desire primarily low-yield weapons with highly accurate delivery systems for deterrence in the non-Russian world. Here, I'm not talking about sub-kiloton weapons, or so-called "mini-nukes," as some have advocated; but rather, devices in the low-kiloton regime, in order to contemplate the destruction of some buried or hidden

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targets, while being mindful of the need to minimize collateral damage.

I believe we can achieve the low-yield levels that are likely to be most appropriate for deterring wider threats, particularly if we are unable to design and test new weapons under a nuclear testing moratorium, by depending on the features inherent in many current designs in the U.S. stockpile.

An obvious and also very effective approach to obtain low-yield devices would be to use dummy secondaries (the hydrogen or thermonuclear components). This is quick way of achieving single-stage (basic atomic bomb) yields without having to modify the devices, or to repeat flight tests for the delivery systems or to conduct additional nuclear testing.

There are many other aspects of modernizing the warheads' electronics as we bring them into being under CapTwo. We could add the ability to retain a much larger number of pre-planned targets within each delivery system, either within the electronic memories of each warhead or within the fire control systems, as has been achieved in advanced conventional systems.

We will also want to consider possibilities for instantly determining impact coordinates and instant Bomb Damage Assessment (BDA), through already-developed technology, in conjunction with the existing satellite nuclear explosion detection system.

Such a system would critically depend on the defense satellite constellations still functioning during a conflict in which only a limited number of nuclear weapons would be available for use.

During the Cold War, we had always assumed that, in any strategic nuclear conflict with Russia, the satellite constellations would probably be severely damaged. Changing this assumption might open up even greater opportunities for imagination, for example, the ability to include Global Positing System (satellite) guidance for even greater target precision.

Many of the improved guidance systems now being incorporated into a variety of modern conventional munitions could quite easily be applied to nuclear delivery vehicles. Similarly, for the first time it should be possible to minimize collateral damage — and insure against any compromise of design technology — by including technology that could harmlessly destroy any U.S. warhead without giving nuclear yield, for example, if it had flown off course to the extent that it would fall outside pre-planned delivery coordinates.

## Arms control implications

The partitioning of our nuclear forces into two different capability sets, each designed for a different primary purpose, may also present some opportunities for fresh thinking in the area of arms control.

As the new administration unfolds its arms control strategy it will be timely to examine how the creation of two distinct policies, strategies, and force capabilities might solve some of the classic problems inherent in past agreements. For example, the United States (and no doubt the Russians also) labored heavily in past arms control negotiations to develop definitions that, while restraining each side's strategic nuclear forces in agreed ways, would not also overly constrain the development of new delivery systems intended for conventional payloads. Similar problems can be easily envisioned as we seek to continue the current limitations on forces intended for central deterrence, while also devoting some of our nuclear force to deterring wider threats.

A second problem that must be considered in the arms control arena, as well as in defense planning, is the likely continuing trend of proliferation of both nuclear and other destructive weapons in rogue states. They could not hope to directly defeat the United States in a general conflict, but might very well be prepared to use these weapons in an attempt to deter the United States from intervening in what they perceive to be "their" region.

So far the existing agreements (the Nonproliferation Treaty, agreements to create nuclear weapon-free zones, or nuclear test ban treaties) have had only marginal success. Eventual agreements for limiting CapTwo forces would need to be evaluated against the totality of potential threats.

## Just a start

As with any significant departure from the status quo, there is much more work to be done in evaluating the pros and cons of this duality framework — of reconciling the needs for a continuing central deterrence while also deterring wider threats.

Dividing the strategic world and the corresponding force capabilities into two distinct parts — CapOne and CapTwo — opens up many avenues for thought, and we should thoroughly explore these "new territories" as we undertake the upcoming Nuclear Posture Review. Within our own staff at Sandia National Laboratories, in Albuquerque, each individual who has considered the possibilities — which this approach allows — leaps to additional ideas and opportunities for nuclear deterrence in the future.

# INSIGHT & OPINION

*Analysis, commentary and ideas*

**EDITOR:** JACK EHN 823-3616, jehn@abqtrib.com. **ASSISTANT EDITOR**

## Beware the nuclear warrior

*Developing new nuclear weapons for use against rogue nations would make the United States an outlaw, today's author argues*

Atomic Energy Commission photo

The mushroom fireball from a low-yield 1 kiloton (1,000 tons of TNT) boils out of its crater during the code-named "Ess" nuclear bomb test detonation on March 23, 1955, at the Nevada Test Site. That bomb was slightly smaller than those proposed by Sandia National Laboratories President C. Paul Robinson in Wednesday's Tribune and countered by today's author, Greg Mello of the Los Alamos Study Group in Santa Fe.

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THE NUCLEAR DEBATE

**TODAY'S ARTICLE** is by Greg Mello, the executive director of the Los Alamos Study Group. The organization is a Santa Fe nuclear weapons watchdog group that monitors programs and proposals at New Mexico's two nuclear weapons research centers, Los Alamos and Sandia national laboratories.

**ON WEDNESDAY,** The Tribune featured a proposal — written by C. Paul Robinson, president of Albuquerque's Sandia National Laboratories — to design low-yield nuclear weapons to deter adversarial leaders of rogue nations.

Robinson and Mello attended last month's Nuclear Security Decisionmakers' Forum at the Albuquerque Hyatt Regency Hotel, where Robinson first introduced his ideas. More than 200 of the nation's to nuclear weapons experts attended the forum.

To comment, **write to us at** Letters to the editor, The Albuquerque Tribune, P.O. Drawer T, Albuquerque, N.M. 87103. **Our fax number is** 823-3689. **Our e-mail address is** letters@abqtrib.com.

**By Greg Mello**

What does Paul Robinson, the president and director of Sandia National Laboratories, really want?

Perhaps not surprisingly, Paul told the nuclear weapons community and the country last month in Albuquerque that he wants more kinds of nuclear weapons. But that's not all. He also wants specific nuclear guidance, or "doctrine," as it is called in the nuclear priesthood, and he wants that doctrine blessed by the commander-in-chief, the president of the United States.

His doctrine would lay down the basis for the actual military use of nuclear weapons against the Third World.

Such guidance already exists, to some extent, in secret form. Paul wants this kind of guidance made explicit. Explicit to whom? To the military's Joint Chiefs of Staff, who might doubt the value of nuclear weapons; to Congress, which funds them; to the American public, who must at least passively acquiesce; or to the world, for whom such "guidance" is correctly understood as a threat.

In other words, Paul would like the highest national authorities to publicly endorse the permanent value of nuclear weapons as the absolute arbiter of conflict. They also happen to be his laboratories' primary products. Such an endorsement would aid Paul's enterprise in every way, not just in recruitment and retention of staff, but also in funding and in providing a clear set of missions around which weapons managers can organize activity and contrive a sense of meaning.

## The pitch

The whole package would consist of the nuclear weapons, modified for their new roles, associated doctrines for use, and pre-planned attack strategies for every potential aggressor country. He calls this "Capability Two," or the "To Whom It May Concern" nuclear arsenal.

Such a formal structure does not currently exist. It would be created to complement what he calls "Capability One," the arsenal and war plans we have today.

## TODAY'S BYLINE

**Greg Mello** is the executive director of the Los Alamos Study Group, a Santa Fe nuclear weapons watchdog group that monitors programs and proposals at New Mexico's two nuclear weapons research centers, Los Alamos and Sandia national laboratories.

Today's commentary is a response to the proposal featured in Wednesday's Tribune by C. Paul Robinson, president of Albuquerque's Sandia National Laboratories.

Both men attended last month's Nuclear Security Decisionmakers' Forum at the Albuquerque Hyatt Regency Hotel, where Robinson first introduced his ideas for low-yield nuclear warheads to deter rogue nations.

Paul is "worried," he says, that the American public may not value nuclear weapons properly. He would have the public esteem the weapons made by his laboratories *absolutely*, not just as a temporary expedient, or liability as it may be, but as a unique, permanent, and irreplaceable cornerstone of our national life. He recognizes that we are a nation which likes its security in absolute terms, and suggests that our liberty be founded not so much on life, liberty, and the pursuit of happiness, as on the threat of nuclear annihilation for anyone who might successfully threaten our military forces anywhere on the planet.

To achieve such absolute security, Paul offers us the absolute weapon. In order to better communicate his ideas to the public and the world, he would like them to be enshrined in the "Nuclear Posture Review" now under way in the Bush administration. This document will receive the imprimatur of the president, and possibly of Congress as well, and it will guide the actions of both Congress and the executive, since it will be treated as a consensus national statement about nuclear weapons.

In reality, it will have been written in secrecy by a few people, like Paul Robinson. After this, the next step for Paul and his friends would be to start embodying these ideas in new hardware, in revised military force structures and revitalized institutional cul-

tures at the nuclear labs and plants, in new diplomatic relationships (or the lack of them), and in our military and trade alliances.

If this could be accomplished to any degree, Paul and his friends, and their successors in the nuclear weapons business, will indeed get what they want, and it will be very difficult to take it away from them and return to a semblance of democratic control.

Such actions as Paul recommends would collectively imply the abrogation or devaluation not just of the Nuclear Nonproliferation Treaty, but the entire fabric of humanitarian law that constrains the violence of war.

Such a shift need not require any painful political debate that would make us conscious of our precipitous decline as a culture and a nation. With Paul's program in place, it would just *happen*. One day we might wake up and find ourselves having "nuked" a city full of real families near a military facility in Iran, let's say, to prevent a possible nerve gas attack on our soldiers, who were sent there to secure an oil field. It was regrettable, but the wind shifted, and there you have it. We would then turn a deaf ear to the outcry from every quarter, bully our way forward and prepare for the revenge attacks here at home.

## State-sponsored terrorism

What Paul wants, in other words, is something even more than the (im)moral equivalent of the Cold War. Even during the Cold War, nuclear weapons had no enduring legitimacy, even as weapons of last resort, as numerous polls, treaties, U.N. resolutions, and our overall cultural record testify — with exceptions of course.

The $6 trillion nuclear weapons enterprise is something we have patiently endured, but never loved. Paul wants to change that. Unlike during the Cold War, nuclear doctrine wouldn't be centered around "mutual assured destruction" (although this would remain in place), but around *unilateral* assured destruction, which would have as its cornerstone the willing infliction of civilian

*Please see* **WARRIOR/C3**



**WARRIOR** *from C1*

casualties in large numbers.

Paul may be a very genteel man, but his vision is, in the final analysis, a terrorist vision, in the dual sense that it would make state-sponsored terrorism the avowed policy of this country, as well as provide a most fertile soil for terrorism to grow in other countries.

Let us hope that there are a few clear-eyed souls in the Bush administration who can see some of the implications of what Paul proposes. They will have to pay close attention, however, because Paul uses all the right buzzwords. He casts his proposals skillfully into the highly-euphemized speech preferred by the defense community. Often he rejects the plain-truth version of his program while suggesting a euphemistic alternative.

For example, Paul says, "Nuclear weapons must never be considered as war fighting tools." This seems clear enough, but just one sentence later he offers three roles for nuclear weapons, two of which are precisely war fighting roles.

In "Capability Two," unique attack options would be prepared for each potentially hostile nation, and targets pre-programmed into the weapons themselves where possible. All aspects of such potential future nuclear attacks would, Paul recommends, be planned ahead of time by experts, because real-time response (by duly-elected leaders or their subordinates) "just cannot rise to the same level of sophistication as we could achieve in deliberative planning."

The network of satellites we ostensibly built to monitor possible proliferant explosions would be used for real-time nuclear bomb damage assessment. One has the sense that Paul's plan would, in the end, bend many other plowshares into swords.

## New low-yield 'nukes'

The "Capability Two" weapons would in general have explosive yields in the very low kiloton range, a convenient size because such weapons can be adapted in Paul's labs from existing designs without nuclear testing. Another factor in the selection of this yield range, he says, was to achieve some military effectiveness while "minimizing collateral damage."

There are more details, but if you just imagine yourself before "The Big Board" in Stanley Kubrick's classic movie "Dr. Strangelove," you will have the general drift of Paul's thought. Militarily speaking, it may come as something of a surprise that the weapons Dr. Robinson proposes to use cannot accomplish the objectives he sets out for them.

He suggests that for deterrence to be effective, the U.S. should hold at risk the leadership of enemy countries, or at least their "ability to govern." But low-yield nuclear weapons — even weapons in the kiloton range — just cannot confidently destroy the deeply-buried facilities where those leaders are likely to be. As Paul delicately puts it, there are "still perplexing issues of how to hold at risk hardened or deeply buried underground targets." Put another way, in any race between low-yield nuclear attack options and bunkers, bunkers win hands down.

The "perplexing issues" Paul mentioned include:

- Identifying the "proper" targets.
- Determining the precise location of the real target — which may be moving within that target complex.
- Ascertaining the location of surface features that could be destroyed.
- Avoiding the risk, in the event of an attack on biological or chemical weapon depots, of a near-miss which would carry toxic or infectious agents great distances downwind.
- Destroying an underground bunker at more than modest depths (it doesn't happen).
- Dealing with the total inability, for fundamental physical reasons, to deliver any light-weight nuclear warhead more than a nominal distance into the earth.
- "Minimizing," as Paul delicately puts it, so-called "collateral damage."

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## Euphemisms hide realities

"Collateral damage" is a euphemism for the civilian death and destruction attendant upon a military attack. In the case of a nuclear weapon, even a small one, such "collateral damage" will be extensive.

Weapons in the low kiloton range, as Paul suggests might be appropriate for his "Capability Two," could easily cause hundreds, thousands, or even tens of thousands of civilian deaths, depending upon target location.

In our office we have calculated the military effectiveness of low-yield nuclear warheads against current and former underground Iraqi targets. Even using optimistic assumptions about earth-penetrating nuclear weapons, modestly deep bunkers are not destroyed.

We have also crudely begun the process of assessing the resulting civilian deaths from such an attack on these same targets. The results are simply horrendous in every way. Intense air blast effects, even from underground explosions, and nightmare levels of local fallout will kill thousands of civilians over a wide radius in most cases.

Increasing the yield of the weapon to attempt destruction of a deep target would just kill more civilians. And what is perhaps most telling is that no one can predict where, or how many, the casualties will be. Paul's use of the hopeful phrase "minimizing collateral damages" doesn't come to grips with these realities.

Indeed, Paul's plans are more than just ineffective and immoral. They are illegal. In 1996, the International Court of Justice heard a case requested by the General Assembly of the United Nations regarding the legality of the threat or use of nuclear weapons. In brief, the court found that all nuclear weapon use would be illegal, except possibly in the extreme case in which the very survival of a country was at stake.

Clearly, this condition would not be met in the case of an attack on U.S. troops by weapons of mass destruction, or by even the detonation of one or two nuclear weapons on U.S. soil. Even in the case of "very survival," the Court did not find for legality, but simply declined to rule.

Further, the Court found that any nuclear use would need to comply with the laws of war ("humanitarian law"). In brief, these laws — which are taught to every U.S. officer — ban the application of military force which cannot discriminate between combatants and noncombatants, or between neutral and belligerent countries, which is disproportionate to rational military objectives, or which is not actually militarily necessary.

Not even the smallest proposed "mini-nuke" can meet these tests, let alone the kiloton-range weapons Paul proposes. In fact, such use would likely be a war crime of high degree, and could be prosecuted as such. Under established principles of international humanitarian law, willful ignorance or blind obedience in such matters do not by themselves constitute a plausible defense against the assignment of responsibility for crimes carried out with such weapons.

In other words, Paul himself could in theory be liable to prosecution, should the policies he advocates be put into practice.

Not only is the use of nuclear weapons, to all intents and purposes, banned by law, but the improvements that Paul suggests making to the weapons — and in fact their very possession into the future — are policies that the United States has already agreed to end, in binding treaties and in official declarations pursuant to those treaties.

## Nuclear haves vs. have-nots

In 1968, the United States signed the Nuclear Nonproliferation Treaty, or NPT. The essence of this treaty is a deal between the nuclear "haves," like us, who promised to get rid of their arsenals someday, and the nuclear "have-nots," who promised in return never to acquire nuclear weapons. It was a deal the United States strongly wanted then and still needs today. In 1970 the treaty was ratified, making it part of what our Constitution calls the "supreme law of the land."

Some 182 countries have agreed not to possess or help develop nuclear weapons under this treaty, and the norms it establishes are vitally impoitant, even without a direct mechanism for enforcement. Our nuclear disarmament commitment is spelled out in Article VI, which reads in full:

"Each of the Parties to the Treaty undertakes to pursue negotiations in good faith on effective measures relating to cessation of the nuclear arms race at an early date and to complete nuclear disarmament, and on a treaty for general and complete disarmament under strict and effective international control."

This treaty establishes in law two important norms: Do not improve nuclear weapons, and do not possess them — whether it is continuous non-possession by most countries, and/or eventual nonpossession by the five countries recognized as nuclear weapon states in the treaty. It cannot be overemphasized that these norms were sponsored, advanced, and ratified by the full government of the United States, and continue to be advanced and supported in each and every international gathering reviewing the operation of this treaty.

It could be argued that to fulfill this commitment we have only to try, not necessarily to succeed; to end the arms race and to disarm. The United States used that argument before the International Court of Justice in 1996; it was unanimously rejected. The court instead ruled that:

"There exists an obligation to pursue in good faith and bring to a conclusion negotiations leading to nuclear disarmament in all its aspects under strict and effective international control."

These binding disarmament obligations have increased in political importance since the end of the Cold War. The most recent step in this process was the consensus statement reached, after an all-night session in May of 2000, by 155 NPT signatories, including the U.S. and the other nuclear weapons states.

They agreed, among other promises, to: "An unequivocal undertaking by the nuclear weapon States to accomplish the total elimination of their nuclear arsenals leading to nuclear disarmament to which all States and parties are committed under Article VI."

What is important for Paul is the open abrogation of these binding commitments and their replacement with quite different norms, ones which will make the work of his laboratories expressly legitimate. Should that happen, the nuclear nonproliferation regime established by the NPT will unquestionably unravel. Paul may be able to fool most of the people most of the time, but he will not fool the nations whose security is threatened by his ideas.

## U.S respect at stake

For all these reasons and more, the deterrent Paul proposes would not be credible. Therefore it would not deter. Paul's "wider deterrent" would only be credible to the extent that it were — not only in perception but in actuality — mad.

Finally, any use of a nuclear weapon, whether in battle or in reprisal, would in itself comprise a total defeat for the U.S. military and its ideals. It is for those ideals, and not for a more passive concept of "security," still less for global empire, that our ancestors bled and died. The profession of arms acquires its dignity and its respect in society precisely because of its subservience to law and to those ideals, then and now. There is no doubt that Paul's plan, even prior to actual nuclear use, would corrode respect for the military and even for the United States itself.

If some leader or group sought to bring about the downfall of the United States, hardly a swifter means could be found than to lure some feckless U.S. leader into using a nuclear weapon. Such an act would martyr the enemy, provide a potent focus for simmering anti-U.S. resentments around the world, justifying the use of weapons of mass destruction by our enemies, touch off a global scramble for those weapons and the means of their delivery; break apart the alliances on which we depend, liberate individual and organized violence in our own society. It also would de-legitimize our government in the eyes of its citizens.

Indeed, it would be an outlaw act; it would be widely recognized as such; and it would make of this country an outlaw nation.

## *Billboards blast bomb industries*

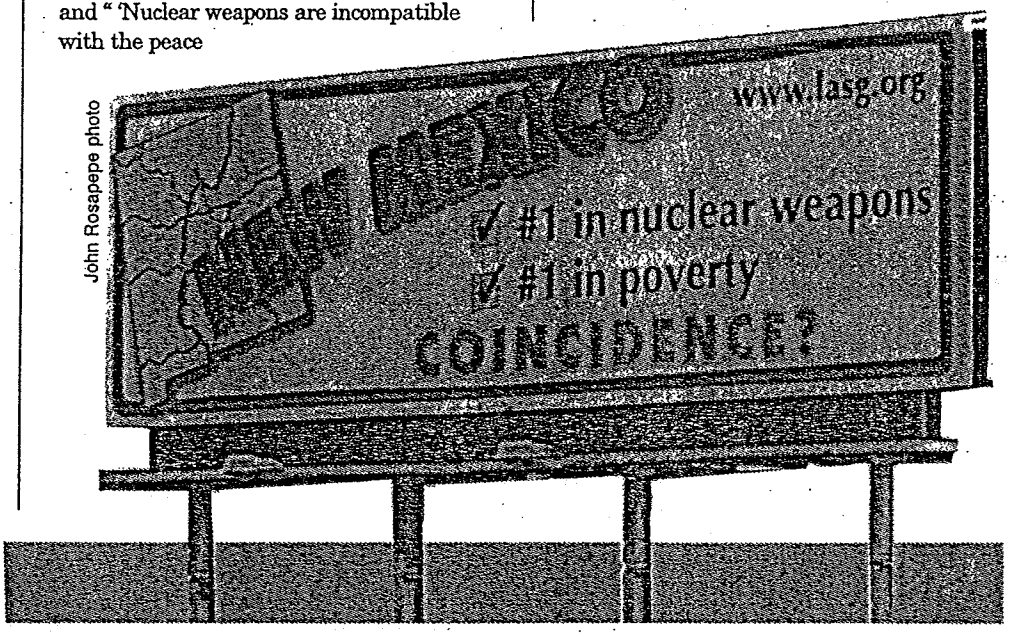
Tourists driving I-25 between Albuquerque and Santa Fe expect to see billboards extolling ski resorts, restaurants and casinos, but may be surprised by a series of evocative ads that question the nuclear-weapons industry in New Mexico.

The Los Alamos Study Group, a non-profit, research-oriented, nuclear disarmament organization in Santa Fe, has placed five billboards with an anti-nuclear weapons theme along that stretch of highway.

The billboards' messages: "Welcome to New Mexico, America's waste colony"; "New Mexico world center of weapons of mass destruction"; "New Mexico #1 in nuclear weapons, #1 in poverty, COINCIDENCE?"; and " 'Nuclear weapons are incompatible with the peace we seek for the 21st Century' — the Vatican."

The billboards highlight the fact that more federal funds ($1.8 billion) are spent per year in New Mexico on nuclear-weapons research and production than any other state, and that the state is home to over 2,500 nuclear warheads. This booming nuclear industry is contrasted with the state's high poverty rates and nuclear-waste problems (Los Alamos Lab's Area G alone contains 7 million cubic-feet of radioactive and chemical waste).

You can reach the Los Alamos Study Group at 212 E. Marcy Street, Suite 10, Santa Fe, NM 87501, call 505/982-7747, e-mail info@lasg.org, or check out the group's Web site, www.lasg.org. — ***John Rosapepe***




John Rosapepe photo

HIGH COUNTRY NEWS 4/23/01

# Sen. Seeks To Restore Funding for Nuke Pits

4/24/01

By Jennifer McKee
*Journal Staff Writer*

The Bush administration's federal budget will leave our country out of pits, not in the pits, according to Sen. Pete Domenici, R-N.M.

And that's a bad thing.

A pit, in this case, is the softball-sized plutonium orb inside every nuclear weapon in the nation's stockpile. Pits cause a nuclear explosion; without them, no nuclear weapon would work.

The United States has not built a new pit since 1989, and some scientists fear the aging pits may not work as planned. To ensure the reliability of nuclear weapons as well as maintain a work force with the knowledge to build a pit, the Energy Department launched a campaign several years ago of building replacement pits in small quantities.

Los Alamos National Lab was designated the nation's new pit production facility.

So far, scientists at the lab have yet to build a certified pit, one that passes rigorous standards and can be placed in an existing weapon.

Thanks to cuts in the latest DOE budget, Domenici said the lab never will.

"This budget puts off the certification and delivery of a pit to the military indefinitely," the senator said last week.

The proposed DOE budget cuts funding for pit production at Los Alamos to $129 million, down from

*See* **DOMENICI** *on* **PAGE 3**

# Domenici Urges Funding for Nuke Pits

*from* **PAGE 1**

$145 million this fiscal year.

Energy Secretary Spencer Abraham, during a visit to the lab last week, said the cuts will not throw the department off its goal of building a certifiable pit by 2003, DOE's self-imposed pit deadline.

According to Domenici, there's a difference between a "certifiable pit," one that is built and could be certified, and a "certified pit," or one that is ready to be delivered to the military and placed into a nuclear weapon.

While the department may produce a certifiable pit by 2003, the DOE's proposed budget cuts render any real-life usable pits a pipe dream for the foreseeable future.

"The budget request is totally inadequate," the senator said. "Under an earlier plan, a new, certified pit was to be delivered to the military in 2001."

That obviously didn't happen, and according to Domenici, the DOE's proposed budget, released earlier this month, "includes no commitment on certification."

He estimates Congress must add another $148 million to the pit budget if DOE expects to have a certified, ready-to-use pit delivered to the military by 2009.

Abraham said during his Los Alamos visit last week that he takes seriously the importance of pit production, but added that while Domenici was one of his best friends when the two served in the Senate together, Domenici "needs to give us a little time" to figure out the Energy Department ropes.

Domenici is already pushing to expand the DOE budget by almost $1.4 billion.

Some say DOE doesn't need all that money to make a pit. Greg Mello, of the Los Alamos Study Group, a lab watchdog organization based in Santa Fe, said many countries routinely crank out pits for a fraction of what the United States has already spent with little result.

"Ask the North Koreans," Mello said, referring to that nation's young nuclear weapons program. "I bet they can make a pit."

# Critics Question LANL Cerro Grande Funds

*Some are concerned about the millions in federal dollars the lab has received to repair the fire's damage — and how they're being spent*

5/6/01

By Jennifer McKee
*Journal Staff Writer*

LOS ALAMOS — The Cerro Grande wildfire of a year ago blackened parts of Los Alamos National Laboratory. Now the fire is bringing in something green — a large windfall of federal money.

Ashes still were smoking around the laboratory last summer when lab managers began adding up their losses:

- 29 destroyed trailers that had been temporary office space.
- 20 computers burned entirely, many more damaged by smoke.
- Miles of destroyed power lines.
- More than 100 storage sheds burned to the ground, including one which held millions of dollars in scientific equipment that melted into a puddle of aluminum.

Congress gave the lab and the Department of Energy, which oversees it, almost $342 million to clean up and repair from last May's Cerro Grande wildfire.

A critic says the sum, almost $90 million more than the cost of the Big I construction in Albuquerque, is another example of the lab and DOE spending huge amounts of tax money just because they can.

Others, like Everett Trollinger, of the DOE's Los Alamos office, which oversees lab spending, said Congress and the government are scrutinizing how every penny of the LANL's fire money is being used.

"They've got a lot of people breathing down their throat," Trollinger said.

So far, the lab and DOE have spent $84 million, or about 25 percent, of the fire money.

JOSH STEPHENSON/JOURNAL

**CONTROVERSIAL STRUCTURE: Los Alamos National Laboratory and the Department of Energy already have spent $84 million on post-fire cleanup and recovery, including $8 million for this dam in Pajarito Canyon designed to protect lab facilities downstream.**

About $8 million went to the Army Corps of Engineers to build a dam in Pajarito Canyon, designed to prevent a flood from washing over sensitive lab buildings there. The fire left hillsides around Los Alamos denuded of vegetation, raising the possibility of flooding or mudslides from heavy rains.

Millions more went into cleaning up, clearing out and otherwise preparing the lab to reopen after it was evacuated along with the rest of Los Alamos on May 7, 2000.

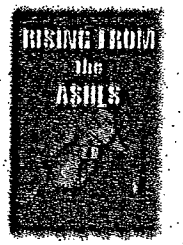
Almost $92 million more is allocated for big-ticket items, some controversial, such as two new office buildings at $5 million a piece, a new emergency operations center at a cost of $20 million, and $25 million to partially rebuild the lab's electronic fire alarm system.

## Fire as an excuse?

Not everyone is pleased with explanations for the big-ticket items. Although public critics are few, other government agencies — behind the scenes — have questioned the amount doled out to the lab.

*See* **CRITICS** *on* **PAGE 8**

*A year ago this month the Cerro Grande Fire was started at Bandelier National Monument. The blaze ultimately swept through Los Alamos, destroying the homes of more than 400 families and individuals. To mark the first anniversary of the fire, the Journal is taking a look at its lingering effects. The series began April 29 and continues through Monday.*



# Critics Question Lab's Fire Funds

*from* **PAGE 1**

"It doesn't take a very sensitive nose to smell a rat here," said Greg Mello, of the Los Alamos Study Group, a Santa Fe-based lab watchdog group.

Mello questions much of Cerro Grande spending, arguing that it's a way for the lab to pay for things it should have bought a long time ago — but didn't in favor of spending for its nuclear weapon programs.

He points to the two office buildings the lab will build, at $5 million each, with fire money.

The lab is using the fire as an excuse, he said, to pay for what it should be buying routinely — suitable office space for workers.

The lab gets more than a billion dollars every year. This year the lab's budget was $1.46 billion, excluding millions spent on construction. That's just shy of the budget for the state of North Dakota.

Mello wants to know why the lab can't build office buildings with money in its annual budget.

"What has happened to the lab's ability to manage money?" he asked.

One vexing problem for LANL is how to fireproof the 46,000 drums of stored nuclear waste and a liquid radioactive waste treatment plant. The lab has $29.1 million budgeted to deal with those problems, and lab budget experts said last week they still don't know exactly how they'll spend it.

## Cleaning up

Before the lab could reopen after the fire, said Jim Holt, LANL's program director for buildings and construction, crews had to survey all 8 million square feet of lab office and work space.

"Everything was dirty inside," said Ming Moy, deputy director of the lab's Cerro Grande Rehabilitation Project, which is planning the rebuilding efforts.

Crews shampooed rugs, cleaned windows and in some cases scrubbed the walls, said James Rickman, a lab spokesman. Computers had to be cleaned. Hundreds of air filters were clogged with ash, and some, like those that sift tiny particles of plutonium from the air, don't come cheap, Holt said.

In all, the lab has allocated about $100 million over two years to build the dam, repair buildings and prevent erosion. Of that, $48 million has been spent.

According to Stephen Mee, one of the project managers for the lab's rehab, that money bought a lot of work. Last year alone, crews tore down 63 old buildings no longer used and at risk to burn in other fires and stacked 20,000 sandbags and 38,000 straw bales and wattles to stop erosion and control potential flooding.

The lab also had acres of forest — some of it burned — to deal with. It spent several million dollars last year sawing down 20,000 burned trees, raking 200 acres of soil baked by the fire into a glaze that would repel water unless manually broken apart, and spreading 10 tons of seed.

The cost of some of the other plans for the Cerro Grande millions has raised questions — especially when compared to the spending of other agencies with similar projects.

Take the lab's forest-thinning project. The lab wants to thin out trees on 10,000 acres, much of it near areas where scientists conduct high explosives experiments. Mee expects the project to cost between $6 million and $9 million, to be paid by Cerro Grande Fire money.

Compare that to the Santa Fe National Forest's thinning projects. A typical 8,000-acre thinning project runs about $2.5 million, said Susan Bruin, of the Santa Fe National Forest. The delicate and expensive Santa Fe Watershed Thinning Project will cost around $5 million, she said, far and away the most costly and painfully orchestrated thinning project on the forest.

But even that is cheaper than the lab's thinning estimates.

The difference, Mee said, is the complicated web of security regulations DOE and the lab must follow to do anything — from working with plutonium to cutting trees — on lab property.

*Greg Mello, of the Los Alamos Study Group, a Santa Fe-based lab watchdog group, questions much of Cerro Grande spending, arguing that it's a way for the lab to pay for things it should have bought a long time ago — but didn't in favor of spending for its nuclear weapon programs.*

Because the thinning crews don't have special security clearances, they'll need to be escorted by someone who does. The rule is one escort for every six non-cleared workers. Additionally, the escorts must run through cumbersome security regulations every time the work crews enter and leave the lab.

## Security delays

All that takes time. Mee estimates DOE work crews lose about 3½ hours of every 8-hour work day going through security.

To make up for the delays, Mee plans on working the crews overtime, and that's expensive, he said. He also has to pay the escorts.

5/6/01

Further complicating things is a DOE-wide ban on open burning.

That means crews can't pile and burn trees culled from DOE lands like they can on the Forest Service. Mee said he plans to get rid of some of the trees as firewood to the public and saw logs for local lumber mills. But that also costs time and money.

Because every single person who wanted a cord of lab piñon would have to go through hours of security procedures to fetch it, Mee said he plans on hiring other crews to bundle up and move the firewood to an accessible place, further driving up costs.

The lab's proposed $25 million fire alarm system also raised eyebrows. Trollinger explained the cost by saying the lab is buying more than standard office building fire alarms. LANL will use specialized computer panels installed in each building designed to transmit news of a fire and any other emergency to a central command.

Critic Mello also questions an effort to catalog archaeological sites that is to be financed with Cerro Grande funds.

"Taken as a whole, they couldn't justify this much money any other way," he said.

Mello said the lab is spending as much cleaning up from the fire — one that burned hardly any permanent structures — as it did in a whole year during the Manhattan Project days. And that's in dollars adjusted for today's inflation.

"What this says is spending money at Los Alamos is considered to be an absolute good by Sen. Pete Domenici and lab leadership," he said. "What this money actually buys is secondary."

Lab officials have said they weren't compensated at all for one costly loss from the fire — damage to research that occurred because the lab had to shut down during the fire or when computer records burned.

Domenici's office is satisfied with the spending. Every month, DOE officers in Los Alamos send detailed reports to the appropriations committees of both the U.S. House and Senate. Domenici is chairman of the Senate Budget Committee.

The lab first requested $408 million for cleanup, said Clay Sell, a Domenici aide. Congress whittled it down from there and has regular oversight over where all the money is going.

"It's appropriate for us to make sure the money is being spent in the way Congress intended," he said. "It all looks square."

# DOE budget cuts curb local ER projects

5/13/01

By ROGER SNODGRASS
Monitor Assistant Editor

The fallout from Department of Energy budget cuts has become more visible and more particular in the last few weeks as the preferences of the new administration have been made more explicit.

While citizens' groups have expressed concern for the risks of delaying environmental cleanup, and environmentalists insist that funding is not the real problem, Energy Secretary Spencer Abraham emphasized his intention to "rethink a host of programs while we craft the Bush Administration's policy."

In presenting the details of the $18.1 billion budget on Wednesday, Abraham argued for a pause to find new approaches.

"When I assumed this office," he said, "I was told that the schedule calls for the remaining cleanup to take some 70 years at a cost of $300 billion. That is not good enough. And I share the frustration of those living near these sites. The question is this: do we follow that course or seek change? I seek change. And that begins with some very serious study."

Meanwhile, the next phase of the budget battles gear up, as Sen. Pete Domenici, R-N.M., chairman of the powerful Senate Budget Committee said on Friday that increasing funding for the Department of Energy next year is "not only appropriate, but urgently needed."

As reduced funding targets for DOE's environmental management (EM) budget for next year became evident to the Albuquerque Operations office, said Ted Taylor, DOE's project manager for environmental rehabilitation, the central office had to defer or cut program elements planned for next year from activities that were in the works this year.

The president's budget, said Taylor, set a figure of $39 million for next fiscal year for environmental

(Please see BUDGET, Page A-12)

## BUDGET

(from Page A-1)

management at Los Alamos National Laboratory, a reduction of about $15 million from the adjusted budget for this year, and provided strict guidelines on how to spend the funds. Top priorities were assigned to groundwater studies and investigating the most complex cleanup problems, those that may be the most difficult to manage.

As local officials weighed LANL's baseline activities on the new scales, many individual environmental programs had to be pared away and deferred in order to meet the new requirements.

Among them were:

- Delays in cleanup of hazardous waste at LANL by as much as 19 years, from 2013 to 2032
- Delays in investigating environmental impacts on San Ildefonso tribal lands and assessing risks of hazardous material in the Native American environment
- Delays in deploying high performance teams to accelerate the investigation and cleanup of high-level waste disposal areas
- Delays in investigation and clean-up of Technical Area 21, an important parcel in the planned land transfer from DOE to Los Alamos County
- Reductions in force of as many as 55 environmental workers, a third of the current workforce, and
- Delays in cleanup of Acid Canyon "hot spots"

The Acid Canyon problems, which were reported to the Los Alamos County Council last month, were the subject of an April 24 recommendation by the Northern New Mexico Citizen's Advisory Board (CAB) to the DOE-Los Alamos Area Office.

Citing 20 years of exposure to radioactively contaminated wastewater from laboratory buildings and a liquid-waste treatment plan, CAB Chair Menice Santistevan-Manzanares requested removal of an additional 228 cubic yards of relatively high levels of radioactive contaminants that were detected on the Los Alamos County land in 1999.

The recommendation was the third most costly among four options, ranging from doing nothing to removing 880 cubic yards, or virtually all the plutonium contaminated sediments.

In a revealing response to the CAB on Wednesday, Area Manager, David Gurulé wrote, "The DOE concurs in your recommendation," and will take steps to prepare a cleanup plan by August of this year.

But, he notes, "Preliminary information shows that the ER Project budget will not support the Acid Canyon cleanup in FY 2002."

His letter holds out the possibility that funding levels might change as Congress completes the appropriation process, and if they do, "DOE will reevaluate the schedule for the Acid Canyon cleanup," perhaps by early fall.

The letter does say that DOE is working with the New Mexico Environment Department and Los Alamos County to post information signs in the Acid Canyon area this summer and plans a public meeting on May 23 in Los Alamos to discuss this action.

Fran Berting, chair of the CAB's Environmental Restoration (ER) committee, helped formulate the recommendations. She called the cuts, "Penny wise and pound foolish."

Taking money away from environmental restoration adds to the total costs. "It is more expensive in the long run, not only from inflation," she said, "but also from added risk."

The longer a radioactive source is left in place, the more expensive it is to make sure it isn't migrating, and the harder to clean it up if it is, she added.

(The ER Committee is meeting at 5:30 p.m. Monday at Fuller Lodge to discuss plans for a workshop on Material Disposal Areas, among the most complicated of the contaminated sites at LANL. There are 26 MDA's at LANL, where waste has been deposited, intentionally or accidentally, either above ground or below the surface in pits, trenches, shafts or cavities.)

In Washington, with the passage of next year's budget resolution out of the way, Domenici said he was confident that Energy and Defense department reviews would "provide guidance to correct what I perceive as a number of extremely unfortunate issues within the proposed budget."

In his prepared statement to the Energy and Natural Resources Committee, Domenici emphasized stockpile stewardship, the aging infrastructure of the weapons labs, and the $100 million reduction in nonproliferation programs.

But he also criticized cuts in environmental management:

"Environmental management programs are seriously reduced," he said. With the proposed budget, it will be impossible to meet key milestones at several facilities. The budget will result in failure to comply with legal mandates at several sites."

Gregg Mello of the Los Alamos Study Group, a persistent critic of the laboratory, said he didn't see why such a relatively small cut for environmental restoration couldn't easily be made up from the special supplemental appropriation LANL received after the Cerro Grande Fire.

"The fire moneys are more than enough to make up for the alleged shortfalls in the budget," he said, noting that money for the LANL and county's joint new emergency operations center could more than cover the current shortfall," he said.

"They are bellyaching and gold-plating to suck as much money out of Congress as they can," said Mello. "I don't think the emergency operations center is needed; I don't think it's right to fund new buildings with fire money, or do upgrades to capital plant with emergency checks from Congress. ... It is in the lab's interest from a public relations perspective to pull out the stops and get the place cleaned up, to remove the legacy of the past to the extent possible; and to stop dumping."

# NUCLEAR ANNIHILATION

A new book says nuclear weapons aren't just morally wrong—they're illegal.

5/16/01

BY WINIFRED WALSH
wwalsh@sfreporter.com

***Nuclear Weapons and International Law in the Post Cold War World*** **was published by the Austin & Winfield press and is available for $65.**

A 30-year veteran of commercial litigation, New York lawyer Charles Moxley knows how to isolate an argument, hone in on its weaknesses and blow it to pieces. His most recent target is the legality of nuclear weapons.

His book, *Nuclear Weapons and International Law in the Post Cold War World*, has weapon policy wonks talking from coast to coast. Locally, Greg Mello, director of the Los Alamos Study Group is touting the book as "erudite and accomplished" and has used it as a textbook in the group's internship program. On the other side of the country, Columbia Law School Dean David Leebron and former Secretary of Defense Robert McNamara have praised Moxley's work as well. The author spoke this week on *Talk to America*, and recently made a presentation to the United Nations.

To the average citizen, war may seem like an all-out barrage of killing, but numerous rules and laws aim to make it as civilized as possible. In the body of international law that governs war, the legality of nuclear weapons is unsettled. The United Nations' International Court of Justice took up the subject in 1996, but its decision was not conclusive. Large-scale nuclear weapons are generally illegal, it said, but small-scale nuclear weapons might be legal in some situations.

Moxley, who also taught litigation subjects such as evidence and professional responsibility at St. John's Law School in New York for about seven years, is not so much a nuclear activist as he is a practicing lawyer who wants to end the threat of nuclear warfare. His book, which took 10 years to write, attempts to prove definitively that all nuclear weapons are illegal. The Reporter interviewed Moxley from his office in Washington, DC.

**Why do you believe nuclear weapons are illegal under international law?**

I say in my book that I take it from the US's own mouth. What I say is essentially that the US, in its own statements in the US military manuals, states that if you can't control the effects of a weapon it's illegal to use it.

In the case of smaller nuclear weapons, the lack of control comes from the radiation. I assume if you have a certain blast effect, you have a level of control over the blast, but with radiation, you can't control the effects. They are affected greatly by the weather and a number of other factors.

Also, when it comes to accuracy, I think we only have statistical accuracy. I say it's very unrealistic to do a legal evaluation of the situation in a laboratory environment. The circumstances under which we would use nuclear weapons would be extremely dangerous and unpredictable.

**Do you think nuclear weapons are legal under any circumstances?**

What it comes down to is this: What do you say to the state that says we are wonderful, we are the next Athens and the defense of our country transcends all other values? This is the good state that thinks it can jeopardize the health of others to save itself. Can you threaten the human future for the defense of one nation or regime? That's the basis of my argument, that no state can do that.

**What effect, ultimately, do you hope your book will have on the world?**

My hope is that my book will change US policy. There's a whole movement and direction of minimizing these weapons, and I don't think we even want them.

So the question becomes, how do we step down and back away without looking weak? It's interesting, and a question I've faced. I do a lot of presentations and people make comments saying that I'm too idealistic and that my theory is one of pacifism. I tell them that it's actually the opposite. I recognize that we have enemies and need to defend ourselves, and I say, "Why don't we do it with weapons we can actually use?"

**Who's accountable under your theory that nuclear weapons are illegal?**

When people talk about whether nuclear weapons are lawful or unlawful, people tend to look at states, but I believe individuals can also be held accountable. The Nuremberg principals apply to individuals as well. The military leadership, the civilian leadership, members of the government, were all prosecuted. My point is that it's not only unlawful to use nuclear weapons or to threaten to use them, but it's also unlawful to manufacture them. Personal liability bears into my analysis.

**Are you saying that people who work at Los Alamos National Laboratory and build nuclear weapons could someday be prosecuted under international law?**

I think that individuals that are working in preparation of weapons of mass destruction that they know to be the subject of nuclear deterrence can be held accountable. I think there's a genuine issue as to their personal liability.

# Los Alamos lab's tenacious foe

## Mello not mellow over New Mexico's proliferating nuclear facilities

By Lawrence Spohn
The Albuquerque Tribune

SANTE FE — The sign on Greg Mello's door mockingly shouts, "Fallout Shelter."

On his top shelf are "radioactive plants" — collected, he says, from polluted lands 35 miles to the west.

There, in the picturesque Jemez Mountains, is the object of Mello's frustration: Los Alamos National Laboratory.

wall.

Still, the confrontation, like others LASG has forged, forced the lab and its proponents to at least engage in the debate and defend their views.

An engineer by training, Mello hasn't favored confrontation. He has taken an intense analytical approach to assessing the lab's programs, plans and budgets — exposing what he believes is a mentality of "nukes forever" and "a colossal waste of resources."

Indeed, much of the time, he sounds more like Don Quixote than an ideological nuke-buster.

"We are interested in social justice, stewardship of the Earth, human dignity and economic sustainability," he says of the study group.

Those fundamental values, he says, cannot be squared with the development, threat or use of nuclear weapons.

While he says he appreciates the need for the United States to safeguard and maintain its current nuclear weapons stockpile, he adds that he firmly believes it is a role, which along with the stockpile itself, that ultimately should end.

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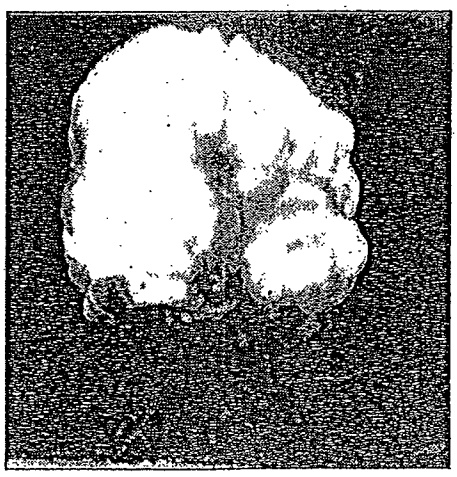

The atomic age began with this blast in the New Mexico desert on July 16, 1945, near what is now the Los Alamos National Laboratory. Greg Mello and his anti-lab Los Alamos Study Group characterize New Mexico as 'America's nuclear weapons colony.'

New York Times

## Birthplace of nuclear arms

It is the birthplace of nuclear weapons and still the world's premier nuclear weapons lab — one of three administered by the Department of Energy.

Some 60 miles to the south, along Interstate 25 and Albuquerque's Gibson Boulevard, those frustrations are expressed for all to see.

Along these roads are several giant billboards, put together by Mello, that display (at a cost of about $4,000 a month) the infamous atomic mushroom cloud and describe New Mexico as "America's nuclear weapons colony."

"It's true," says Mello, executive director of the Los Alamos Study Group, which has been bird-dogging the Los Alamos lab since 1989.

New Mexico, he points out, is easily the nation's top nuclear weapons state, with installations that include Los Alamos and Sandia National Laboratories, the DOE's Albuquerque Operations Office and one of the nation's biggest nuclear weapons storage depots on Kirtland Air Force Base.

## New Mexico as colony

While lab defenders and proponents point to the billions of federal dollars those facilities bring annually into the state, Mello and the Los Alamos Study Group counter that New Mexico fits the classic definition of a colony — in which imperialist capital is invested to extract a local resource at the expense of the colony's overall health, economy and social well-being.

He argues that it is no coincidence that New Mexico, even during the greatest economic expansion in U.S. history, continues to rank near the bottom in most economic and social measurements, including per-capita income, education, child welfare and health care.

The mild-mannered Mello says that long after the Cold War has waned, New Mexico's nuclear weapons culture continues "to hold hostage not just the Congress and the people of the United States, but the whole planet."

The study group has been ardent — and audible — in its criticism of Department of Energy plans to consolidate the nation's far-flung nuclear weapons complex in a miniature, virtually self-sufficient version at Los Alamos.

## 'Not nuclear disarmament'

Citing DOE plans to use the Los Alamos lab to produce perhaps hundreds of plutonium pits — the atomic triggers for thermonuclear bombs — Mello says simply: "This is not nuclear disarmament."

Mello said he believes nuclear weapons, in and of themselves, are as evil as the mass-murder technology used by Nazi Germany and should be opposed by all people on fundamental humanitarian and environmental grounds.

Still, Mello is not a stereotypical rabid, anti-nuclear activist.

Instead, he challenges Los Alamos with a growing portfolio of analyses and arguments that raise questions about what the lab is doing and where it is going.

Long known on the hill as the thinking anti-nuke group, LASG, quite naturally, isn't embraced by the lab, which is frequently bashed in LASG news releases and besieged by the group's Freedom of Information Act requests.

Officially, says Christina Armijo, Los Alamos Lab community relations director, "the study group has been an important element in advancing constructive dialogue."

She said the group's scrutiny has stimulated "interest in the diverse opinions about the laboratory's mission."

"Our mutual interactions and dialogue, despite our differing stances on the work that we do, have proven to be appreciatively respectful and civil in nature over the years," Armijo adds.

Mello's group was reserved during last year's Cerro Grande fire, during which other environmental and anti-nuclear critics raised questions about radioactive contaminants in the smoke plume.

Still, the study group has produced its share of heat on the hill.

Mello's group won a battle with Los Alamos' Bradbury Science Museum, which chronicles the nuclear era at the lab. It got wall space to display an alternative picture: the human ravages and devastation endured by Japan's Hiroshima and Nagasaki, the only cities bombed with nuclear weapons.

A Los Alamos veterans and lab retirees group countered with its own claim for museum space to present a view of a pre-war, barbaric Japan. They got half of the

Paper: Seattle Times, The (WA)
Title: Modernizing U.S. nuclear weapons to cost millions
Author: Jonathan S. Landay
Date: June 1, 2001
Section: News
Page: A8

THE ENERGY Department says that unless it gets more money to renovate the nation's aging nuclear-weapons facilities, it may not be able to certify the U.S. arsenal without resuming underground tests.

WASHINGTON--Although President Bush is promising deep cuts in the U.S. nuclear arsenal, his administration also is considering a six-year plan that could exceed $2 billion to renovate and improve the nation's aging nuclear-weapons laboratories, assembly plants and testing facilities.

Officials who manage the Department of Energy's (DOE) Stockpile Stewardship Program, which maintains the country's estimated 10,500 nuclear weapons, say they need the money to fix crumbling buildings, install modern equipment and attract a new generation of nuclear scientists.

Critics oppose the new spending, charging the program is bloated by mismanagement and cost overruns and is really intended to design new nuclear weapons. DOE and laboratory officials deny those allegations.

Stockpile Stewardship uses computer simulation and other experimental methods to monitor nuclear weapons to make sure they remain safe and will still work as designed as they age.

Warheads periodically are taken apart and checked for corrosion and other problems, and defective parts are replaced. U.S. nuclear warheads usually last about 18 years. The oldest is 30.

## Instead of underground testing

The program is used in place of underground nuclear testing. The United States declared a moratorium on nuclear-test explosions in 1992. Every year since then, the DOE has certified the nuclear arsenal as reliable, but its managers say unless they get more money for renovations, they may not be able to continue certifying the arsenal without resuming underground tests.

"My confidence in our ability to maintain the reliability of the weapons in our stockpile without nuclear testing is being impacted by several trends that we see," John Browne, the director of the Los Alamos National Laboratory, told Congress in April.

The weapons are "not aging gracefully," and the government doesn't have the modern facilities and equipment it needs to renovate them and make replacement parts, he said.

DOE officials who oversee Stockpile Stewardship refused to reveal the overall cost of their six-year plan to renovate the nuclear-weapons complex, but they said it would cost $300 million the first year and $500 million a year for the last several years.

It's costing $5 billion to maintain U.S. nuclear weapons this year, $1 billion more than originally estimated because of cost overruns and delays. The administration is seeking $5.3 billion for 2002.

## Mounting problems

In congressional testimony and in interviews, DOE and laboratory officials said the stockpile program is threatened by mounting problems at three national laboratories, Los Alamos and Sandia in New Mexico and Lawrence Livermore in California.

They also said the nation's underground nuclear-test site in Nevada and the four plants where U.S. nuclear warheads are assembled and serviced or components are made--Pantex near Amarillo, Texas; the Savannah River Site near

Augusta, Ga.; the Kansas City Plant in Kansas City, Mo.; and the Y-12 plant at Oak Ridge, Tenn.--need to replace old buildings, unsafe work spaces and obsolete or inoperative equipment.

For example:

** At the Pantex Plant, where nuclear warheads are assembled and disassembled, leaks in roofs sometimes have forced technicians to stop work and cover some warheads with plastic bags, said Dennis Ruddy, president of BWXT Pantex, the contractor that runs the plant.

** At the Y-12 plant, built during World War II as part of the Manhattan Project, which produced the world's first atomic bomb, chunks of roof fall out so often that workers wear hard hats, said John Mitchell of BWXT, which also runs the Tennessee plant.

** At Los Alamos, the birthplace of the world's first nuclear weapons, radioactive waste pipes leak and must be wrapped in plastic to prevent spills and contamination, said Gen. John Gordon, the head of the National Nuclear Security Administration, the DOE agency that oversees U.S. nuclear-weapons programs.

The United States already is spending more every year on average to maintain its nuclear arsenal than it did during the Cold War, according to a study by the Brookings Institution, an independent Washington think tank.

The United States spent an average of $4 billion a year in 2001 dollars throughout the 50-year Cold War to build and maintain a much larger nuclear arsenal, according to the Brookings study, "Atomic Audit."

Warheads contain as many as 6,000 parts--made of metal, plastic and other materials--and must be monitored for corrosion, decay and problems caused by age and exposure to radioactivity.

Moreover, plutonium, the warheads' explosive fuel, grows brittle with age, raising concerns that aging explosive assemblies may not perform as expected.

Some experts, such as Greg Mello of the **Los Alamos Study Project**, a private group that monitors the nuclear-weapons programs, say plutonium remains effective for more than 100 years. Others say the DOE's own studies suggest it lasts for 60 to 100 years.

The annual cost of the Stockpile Stewardship Program is probably twice what's needed, said Robert Civiak, a physicist who worked in the White House budget office for 10 years monitoring nuclear-weapons spending.

"If you want to maintain existing weapons, then all you need to do is focus on the existing stockpile program, in which they take apart 10 to 12 weapons a year and fix problems that they find," Civiak said. "They are not focusing on their program. They are focusing on pushing the envelope on the development of nuclear weapons."

Author: Jonathan S. Landay
Section: News
Page: A8

# GAO Critical of Lab Purchases

## Post-Fire Buying Focus Was Local

6/6/01

By Jennifer McKee
*Journal Staff Writer*

Los Alamos National Laboratory paid more than it should — in some cases more than the manufacturer's suggested retail price — for computer equipment purchased in the heady days after the Cerro Grande Fire, according to a government report.

According to the report released Tuesday from the General Accounting Office, the investigative arm of Congress, the lab could have saved money, up to 25 percent, if LANL purchasers had bought computers on-line or from government suppliers.

Lab officials countered some of the criticism saying the lab tries to spend as much of its billion-dollar-a-year budget as possible at local stores.

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As part of ongoing studies of the lab's post-fire spending, congressional investigators examined a small sample of the lab's computer and electronic purchases made last summer to replace equipment ruined in the May 2000 Cerro Grande Fire. The investigators looked at just 17 individual purchases, totaling $32,971, compared with millions of dollars spent to replace ruined equipment after the fire.

Nonetheless, they found that the lab took advantage of discounts on only five of the purchases. In five other purchases, the lab paid roughly the same retail prices any consumer buying a single computer would pay. In two cases, the lab paid more than retail prices. In five other cases, the lab saved money.

The report also zeroed in on several potentially money-wasting purchasing practices the lab generally uses.

For one, LANL, in contrast to some other Department of Energy programs, has no maximum standards computer equipment must meet. Instead, the lab has minimum standards. In the case of the 17 purchases examined for the report, every one surpassed the minimum requirements. But according to the report, there was no way to tell if the "extras" included on the equipment, which also drove up costs, were justi-

*See* **FEDS** *on* **PAGE 3**

# Feds Critical of Lab Computer Purchases

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fied.

In some cases, they clearly were not. The report cited one example — a printer used by one lab employee and an assistant. The printer was a suped-up model with lots of memory designed to be used by many people in an office. It cost more than $1,400. Neither of the two people using the printer had any need for the costly extras. Investigators said the lab could have bought a cheaper printer — costing between $280 and $700 — that would have worked just as well.

Also, unlike other Department of Energy projects, the Los Alamos lab buys a hodge-podge of different brands of computers. This drives up maintenance costs, the report said, and makes it tougher to communicate between computers and share files. The report estimated the lab could save up to $10 million over 10 years buying the same brand of computers, especially if the lab set up some reliability standards for the machines and bought them in bulk.

The report also questioned the lab's policy of buying computers "just in time." That is a lab practice that lets individual lab employees buy supplies from pre-authorized local suppliers at a discounted rate. The lab doesn't track "just in time" purchases of less than $25,000. But according to the report, the lab spent $46 million last fiscal year in such purchases, some of which were computers and other equipment that could have been bought online or in bulk.

A Department of Energy spokesman was unavailable for comment Tuesday.

Lab representative John Gustafson said some of the reasons the lab buys small and locally — not online or from government suppliers — is because LANL wants to support the local economy. Ideally, Gustafson said, the lab tries to buy equipment from northern New Mexico companies, excluding Albuquerque.

According to the report, the lab defended some of its purchases saying that after the fire the goal was to replace the equipment that was destroyed, not necessarily to find a cheaper deal or replace the ruined computers with something less. Lab officials also pointed out to the investigators that the purchases were made at an unusually stressful time for the lab — just days after the Cerro Grande Fire scorched the place and left some lab employees homeless.

David Bacon, a board member of the Los Alamos Study Group, a lab watchdog organization, also questioned the lab's spending.

"It's a strange way to run a railroad," Bacon said. "Why do they buy retail?"

6/6/01

# Ex-DOE Head Joins Anti-Nuke Trustees

5/12/01

By Jennifer McKee
*Journal Staff Writer*

Bill Richardson, who has served as a New Mexico congressman, ambassador to the United Nations and U.S. Energy secretary, has been elected to the trustees of an environmental group that has repeatedly sued the Energy Department.

Richardson was unanimously elected to the board of trustees on Thursday of the National Resource Defense Council, a 31-year-old environmental and public health organization with 450,000 members nationwide.

The group opposes nuclear weapons and works to halt global warming, among other things.

As head of U.S. Energy Department, Richardson was charged with overseeing the nation's weapons labs — including Los Alamos National Laboratory — which invented, perfected and maintains America's nuclear-weapons arsenal.

**RICHARDSON: Also on two oil company boards**

Since retiring with the end of the Clinton administration, Richardson has also joined the boards of two Texas-based oil companies.

Allan Metrick, communications director for the Defense Council, said those things were not strikes against Richardson.

"He brings the respect of many world leaders who are concerned about climate change and global warming," Metrick said. "His access to a large portion of the global community will be really beneficial to our organization."

Richardson joins 41 other trustees, among them actor Robert Redford, Chief Operating Officer of Warner Bros. Alan Horn, and George Woodwell, the man who first sounded an alarm over global warming.

Richardson is the first and only trustee to ever head a cabinet-level government agency, Metrick said.

"We thought he was an excellent administrator," he said of Richardson's stint as Energy secretary. "He brings to the board geographic diversity, ethnic diversity and a great intellect and drive."

Metrick said it would be "inappropriate" to disqualify Richardson from the board of the defense council because Richardson's former duties as top caretaker of several thousand nuclear bombs and warheads.

Trustees, who are not paid, meet four times a year to set the organi-

*See* **RICHARDSON** *on* **PAGE 3**

# Richardson Joins Environmental Group's Board

*from* **PAGE 1**

zation's policy, Metrick said. Trustees serve two-year terms and can only be re-elected by a vote of the entire organization.

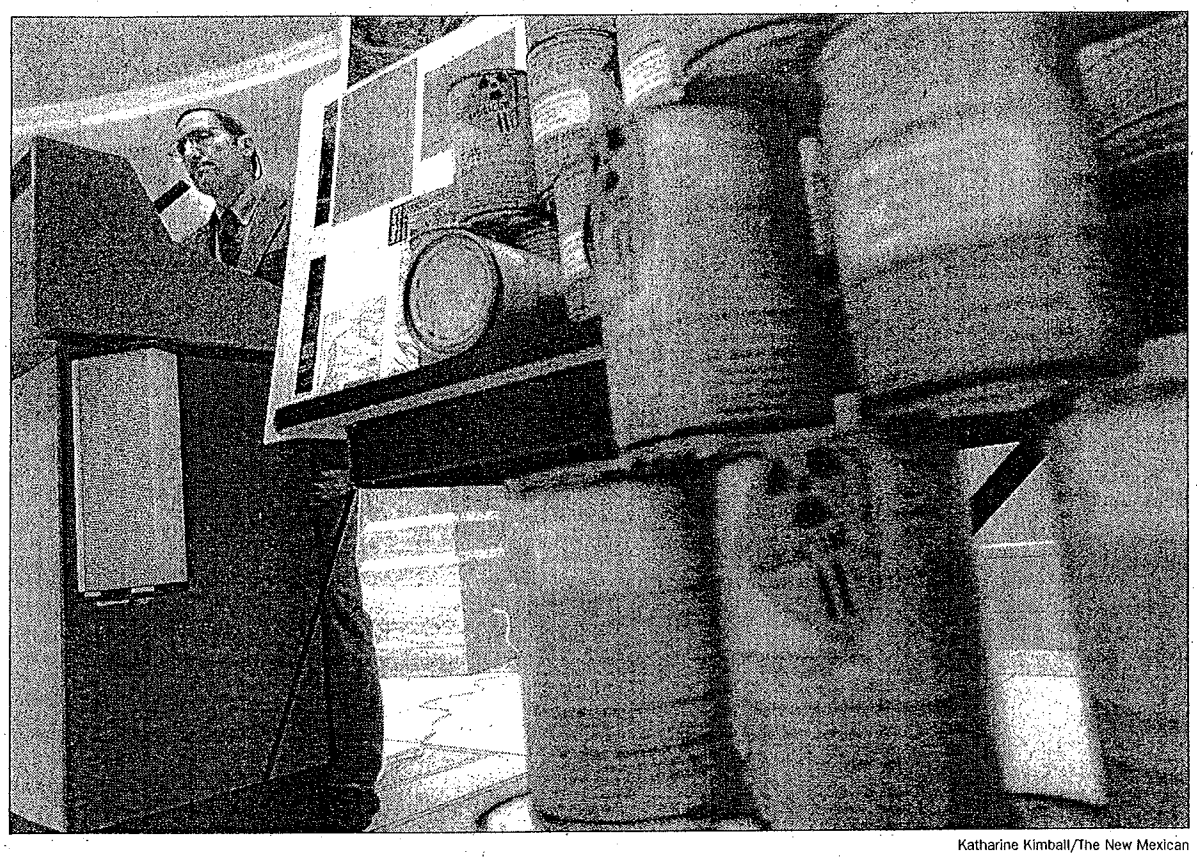
They also must agree to the group's principles, said Christopher Paine, a senior analyst with NRDC who often works on projects in New Mexico, which includes pledging to support a variety of environmental and health concerns such as nuclear proliferation and global warming.

Paine and Greg Mello of the Santa Fe-based Los Alamos Study Group, which has been a watchdog of the Los Alamos lab for years, said Richardson's new role as a trustee bodes well for New Mexico, especially since Richardson seems to be headed for a race for governor.

"His decision to put his counter down on the side of the environment and go with that is great," Mello said. "If this means he's attaching more importance to the environment and recognizing how threatened it is, both in New Mexico and worldwide, I can only say it's a good thing."

Richardson was traveling Monday and could not be reached for comment. Karen Golembeski, Richardson's spokesperson, said Richardson joined "the superb international organization primarily for its work on global climate change."

6/12/01



Katharine Kimball/The New Mexican

**Greg Mello, director of the Los Alamos Study Group, listens during a press conference launching the group's 'CAN-paign' program inside the state Capitol Rotunda on Thursday. The CAN-paign plans to send cans of food labeled with a letter addressed to Gov. Gary Johnson requesting that the disposal of nuclear-waste stop in the Los Alamos National Laboratory Area G landfill.**

# Visualize Whirled Peas

6/29/01

## Group using canned foods to protest nuclear-waste dump

By KRISTEN DAVENPORT
The New Mexican

*Greg Mello said his "CAN-paign" is intended to shut down the on-site dump so that Los Alamos lab is forced to pay more attention to how much radioactive waste it generates during its nuclear-weapons work.*

Perhaps someday it will be legend in these parts: how thousands of cans of Del Monte peas stopped a nuclear-waste dump.

Greg Mello, director of a Los Alamos National Laboratory watchdog group, is trying to convince citizens to buy 45,000 cans of food — from peas to pork-n-beans — dressed up to look like drums of nuclear waste and then mail the cans to Gov. Gary Johnson.

The labels will also ask Johnson to convince his staff to shut down Area G, the laboratory's personal nuclear dump where about 45,000 drums of waste are buried each year.

A study several years ago showed so much waste was going to Area G that it contained more than the Waste Isolation Pilot Plant, the nation's official repository for nuclear waste in southeastern New Mexico, ever will.

The 100-acre site on a mesa top in Los Alamos contains about 10 million cubic feet of low-level radioactive and chemical waste. The dump — with its sprawling white tents that protect unburied waste from the elements — is visible from high-elevation roads as far away as Truchas.

Mello drew a parallel between his campaign and two common bumper stickers — the first asks drivers to "Visualize World Peace." A bumper sticker, apparently created in response, says: "Visualize Whirled Peas."

Mello says the Los Alamos Study Group is taking those messages to heart.

"We have to go a lot farther than visualizing whirled peas," he said. "So as it turns out, we're selling them."

The lab is proposing further expansion of the Area G dump, possibly to accept waste created by a proposed pit-production facility and a new plutonium facility.

Los Alamos is the national laboratory that is slated to be in charge of producing the nation's pits, the fissioning core of a nuclear bomb, which contain plutonium-239 and toxic metals such as beryllium.

The new facilities could create thousands more pounds of nuclear waste each year, Mello said.

At a press conference Thursday, Mello said his "CAN-paign" is intended to shut down the on-site dump

Please see **PEAS**, Page B-4

# PEAS

**Continued from Page B-1**

so that Los Alamos lab is forced to pay more attention to how much radioactive waste it generates during its nuclear-weapons work.

Instead, Mello said he hopes the governor and the state environment department force LANL to come up with plans for minimizing their creation of waste before they are allowed to build.

"We want to send the message: No new toys until you clean up your mess," Mello said.

Also, he said, the cans come with information about how much waste the lab generates.

"Not many people know we are dumping that much in Northern New Mexico," he said.

Shari Kulanu, project coordinator for the canned-food campaign, said she is looking for businesses willing to sell the canned "waste" in their stores.

The cans are selling individually for $3 each; in bulk, they can be purchased for $2 each.

The cans each have a space for a stamp; the U.S. Postal Service has confirmed it will mail the cans for $3.50 postage. The study group is asking that the governor eventually turn over the canned food to a food bank.

Diane Kinderwater, Johnson's spokeswoman, did not return a telephone message left Thursday seeking comment on what the governor's office will do with that much canned food.

6/28/01

# Activists Fighting Nuke Waste With Food

## Canned-Good Protest Targets LANL Dump

6/29/01

By Jennifer McKee
*Journal Staff Writer*

A local anti-nukes group plans to amass 45,000 cans of pork and beans, sweet peas and other water-packed delectables to be used as ideological weapons against what they claim is an illegal nuclear waste dump at Los Alamos National Laboratory.

"Not that many people know that we have a nuclear waste disposal" just 19 miles from the Santa Fe Plaza, said Greg Mello, of Los Alamos Study Group, a lab watchdog organization.

The group announced their effort to close down the dump Thursday at a news conference in the Capitol rotunda.

Mello claims New Mexico Gov. Gary Johnson could close down the dump, known as "Area G" under state environmental regulations. To spur Johnson to action, Mello's group intends to deliver 45,000 cans of food — each decorated to look like a 55-gallon drum of nuclear waste — to Johnson's office by year's end.

The Los Alamos lab generates 45,000 drums of nuclear waste every year, Mello said. By dropping off an equal number of canned goods, Mello said he hopes to show Johnson the lab makes more of an environmental mess than it offsets with local jobs.

Mello said he hopes Johnson will deliver the cans to a local food bank to help the people who have not benefited from the more than $1 billion in federal dollars spent at the lab every year.

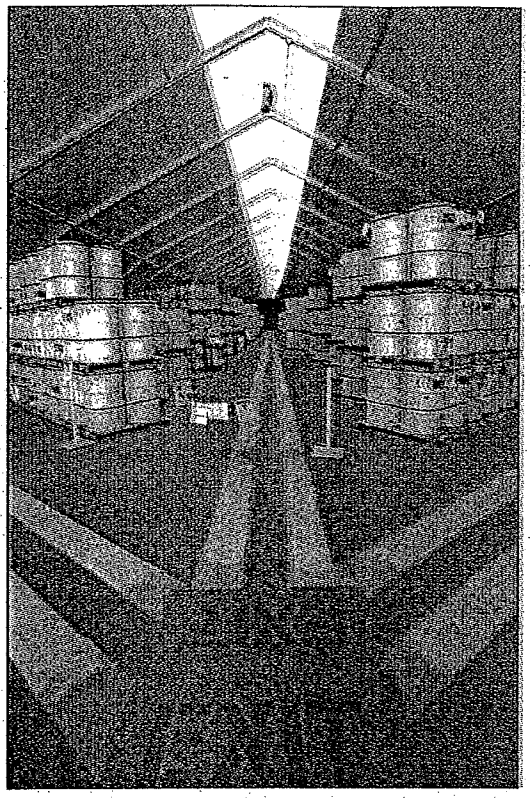
"If we can stop nuclear waste disposal, our political leaders will be forced to come up with real economic policies," Mello said.

The weapons lab, while a steady employer for 50 years, has failed to lift New Mexico from among the poorest, most violent states in America, he said.

"We need economic policies that are realistically based," he said, "not fantasies based on dog-and-pony shows for politicians."

Area G, Mello said, is the burial ground for a mixture of low level and transuranic nuclear waste at the lab since the 1950s. "Transuranic" is the technical word for plutonium and other heavy, radioactive elements.

*See* **LANL** *on* **PAGE 2**



JOURNAL FILE

**LANL WASTE: Barrels of nuclear waste are stacked in Area G from generations of work in nuclear weapons at Los Alamos National Laboratory.**

# LANL Nuke Waste Targeted

*from* **PAGE 1**

Today, Mello said, Area G holds the equivalent of more than 1.4 million drums of such waste, although not all of it is stored in drums. Some was dumped pell-mell into pits, he said.

Mello said he wants the lab to clean up the site and stop generating new nuclear waste.

"It's been said before, 'No new toys until you clean up your mess,' " Mello said, arguing that the lab should clear out the nuclear waste it has before building new plants that will generate even more.

So far, Mello said, the group has purchased and decorated 1,600 cans of Del Monte string beans, mixed vegetables, sweet peas, corn and pork and beans. The drum-looking label peels off and Shari Kulanu said the decorations are designed to be removed before delivering to the hungry.

*"If we can stop nuclear waste disposal, our political leaders will be forced to come up with real economic policies."*

GREG MELLO OF THE LOS ALAMOS STUDY GROUP

The mock-waste labels are also printed with some brief information about New Mexico rates of violence, rape and poverty, as well as some facts about Area G. The label also contains a letter to Johnson, asking him to close the dump, as well as the governor's mailing address.

"You can actually mail it," Kulanu said.

The cans will be on sale this summer for $3 a piece at local stores, she said.

A spokeswoman for Johnson did not return phone calls.

A lab spokesman defended Area G as a necessary part of the lab's work.

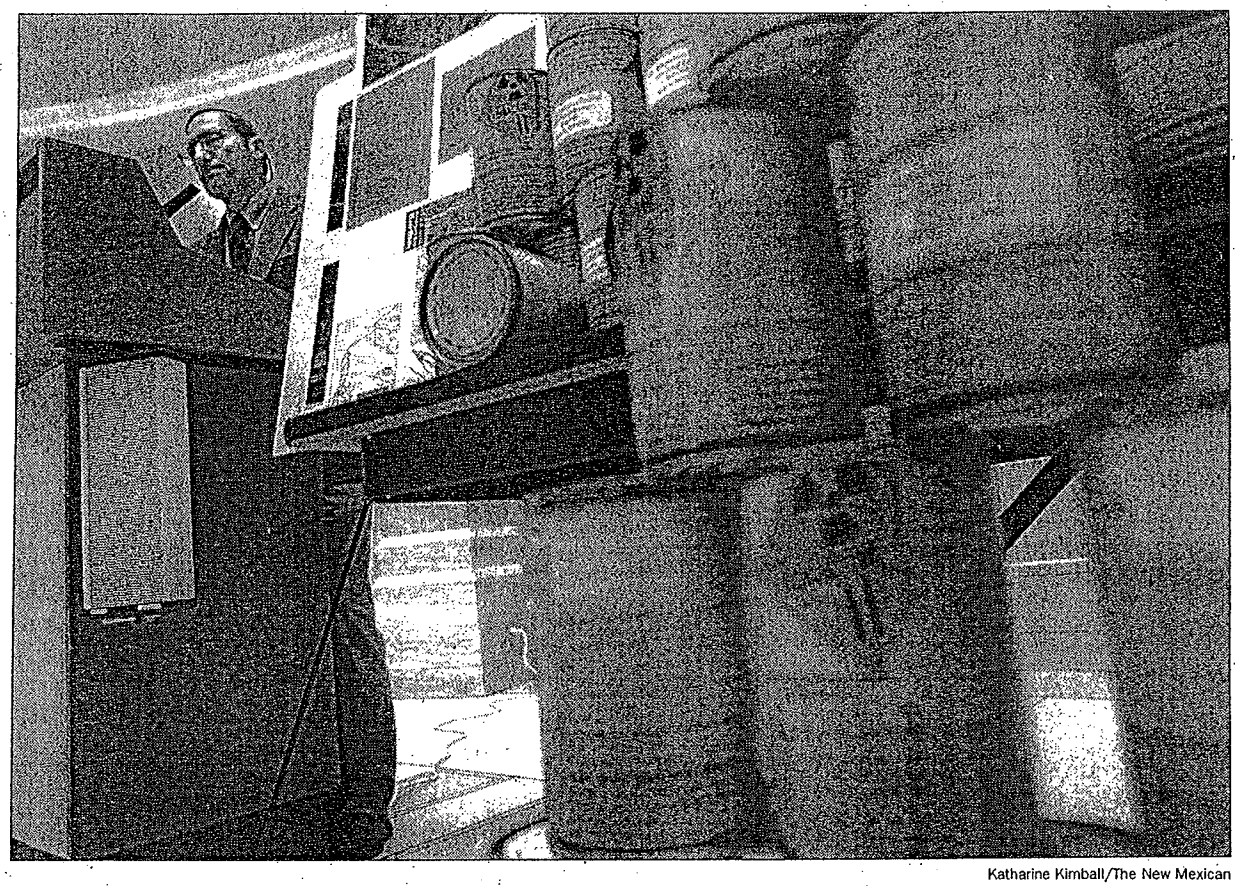
"As long as we have a mission and a mandate from Congress to do our very important security work, some amount of waste will be generated," said James Rickman, lab spokesman. "We will need some place to store it. Area G is a crucial part of our operations right now."

Rickman said the lab would like to move the several thousand barrels of transuranic waste currently stored at the site to the Waste Isolation Pilot Plant near Carlsbad. Los Alamos, however, isn't the only Energy Department site with waste stored and waiting for shipment to WIPP so the lab must wait its turn.

Rickman also defended the lab's economic impacts.

"Los Alamos National Lab's funding and procurement is a major economic driver in the state and has been for 50 years," Rickman said. He cited a University of New Mexico economic study that showed the lab is responsible for 4 percent of the state employment picture. In the three counties surrounding the lab — Los Alamos, Rio Arriba and Santa Fe — 30 percent of the people employed in that area can trace their work to the lab somehow.

8/24/01



Katharine Kimball/The New Mexican

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Common Dreams
NEWSCENTER
Breaking News & Views for the Progressive Community



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# Visualize Whirled Peas

## How Thousands of Cans of Del Monte Peas May Stop a Nuclear-Waste Dump

**by Kristen Davenport**

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Los Alamos is the national laboratory that is slated to be in charge of producing the nation's pits, the fissioning core of a nuclear bomb, which contain plutonium-239 and toxic metals such as beryllium.

The new facilities could create thousands more pounds of nuclear waste each year, Mello said.

At a press conference Thursday, Mello said his "CAN-paign" is intended to shut down the on-site dump so that Los Alamos lab is forced to pay more attention to how much radioactive waste it generates during its nuclear-weapons work.

6/29/01

Instead, Mello said he hopes the governor and the state environment department force LANL to come up with plans for minimizing their creation of waste before they are allowed to build.

"We want to send the message: No new toys until you clean up your mess," Mello said.

Also, he said, the cans come with information about how much waste the lab generates.

"Not many people know we are dumping that much in Northern New Mexico," he said.

Shari Kulanu, project coordinator for the canned-food campaign, said she is looking for businesses willing to sell the canned "waste" in their stores.

The cans are selling individually for $3 each; in bulk, they can be purchased for $2 each.

The cans each have a space for a stamp; the U.S. Postal Service has confirmed it will mail the cans for $3.50 postage. The study group is asking that the governor eventually turn over the canned food to a food bank.

Diane Kinderwater, Johnson's spokeswoman, did not return a telephone message left Thursday seeking comment on what the governor's office will do with that much canned food.



###

# Activists Fighting Nuke Waste With Food

## Canned-Good Protest Targets LANL Dump

6/29/01

By Jennifer McKee
*Journal Staff Writer*

A local anti-nukes group plans to amass 45,000 cans of pork and beans, sweet peas and other water-packed delectables to be used as ideological weapons against what they claim is an illegal nuclear waste dump at Los Alamos National Laboratory.

"Not that many people know that we have a nuclear waste disposal" just 19 miles from the Santa Fe Plaza, said Greg Mello, of Los Alamos Study Group, a lab watchdog organization.

The group announced their effort to close down the dump Thursday at a news conference in the Capitol rotunda.

Mello claims New Mexico Gov. Gary Johnson could close down the dump, known as "Area G" under state environmental regulations. To spur Johnson to action, Mello's group intends to deliver 45,000 cans of food — each decorated to look like a 55-gallon drum of nuclear waste — to Johnson's office by year's end.

The Los Alamos lab generates 45,000 drums of nuclear waste every year, Mello said. By dropping off an equal number of canned goods, Mello said he hopes to show Johnson the lab makes more of an environmental mess than it offsets with local jobs.

Mello said he hopes Johnson will deliver the cans to a local food bank to help the people who have not benefited from the more than $1 billion in federal dollars spent at the lab every year.

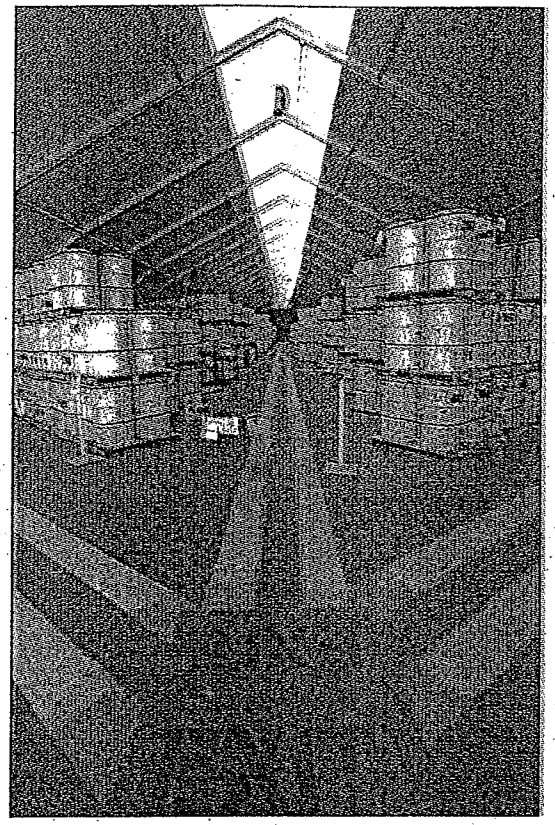
"If we can stop nuclear waste disposal, our political leaders will be forced to come up with real economic policies," Mello said.

The weapons lab, while a steady employer for 50 years, has failed to lift New Mexico from among the poorest, most violent states in America, he said.

"We need economic policies that are realistically based," he said, "not fantasies based on dog-and-pony shows for politicians."

Area G, Mello said, is the burial ground for a mixture of low level and transuranic nuclear waste at the lab since the 1950s. "Transuranic" is the technical word for plutonium and other heavy, radioactive elements.

*See* **LANL** *on* **PAGE 2**



JOURNAL FILE

**LANL WASTE: Barrels of nuclear waste are stacked in Area G from generations of work in nuclear weapons at Los Alamos National Laboratory.**

# LANL Nuke Waste Targeted

*from* **PAGE 1**

Today, Mello said, Area G holds the equivalent of more than 1.4 million drums of such waste, although not all of it is stored in drums. Some was dumped pell-mell into pits, he said.

Mello said he wants the lab to clean up the site and stop generating new nuclear waste.

"It's been said before, 'No new toys until you clean up your mess,' " Mello said, arguing that the lab should clear out the nuclear waste it has before building new plants that will generate even more.

So far, Mello said, the group has purchased and decorated 1,600 cans of Del Monte string beans, mixed vegetables, sweet peas, corn and pork and beans. The drum-looking label peels off and Shari Kulanu said the decorations are designed to be removed before delivering to the hungry.

*"If we can stop nuclear waste disposal, our political leaders will be forced to come up with real economic policies."*

GREG MELLO OF THE LOS ALAMOS STUDY GROUP

The mock-waste labels are also printed with some brief information about New Mexico rates of violence, rape and poverty, as well as some facts about Area G. The label also contains a letter to Johnson, asking him to close the dump, as well as the governor's mailing address.

"You can actually mail it," Kulanu said.

The cans will be on sale this summer for $3 a piece at local stores, she said.

A spokeswoman for Johnson did not return phone calls.

A lab spokesman defended Area G as a necessary part of the lab's work.

"As long as we have a mission and a mandate from Congress to do our very important security work, some amount of waste will be generated," said James Rickman, lab spokesman. "We will need some place to store it. Area G is a crucial part of our operations right now."

Rickman said the lab would like to move the several thousand barrels of transuranic waste currently stored at the site to the Waste Isolation Pilot Plant near Carlsbad. Los Alamos, however, isn't the only Energy Department site with waste stored and waiting for shipment to WIPP so the lab must wait its turn.

Rickman also defended the lab's economic impacts.

"Los Alamos National Lab's funding and procurement is a major economic driver in the state and has been for 50 years," Rickman said. He cited a University of New Mexico economic study that showed the lab is responsible for 4 percent of the state employment picture. In the three counties surrounding the lab — Los Alamos, Rio Arriba and Santa Fe — 30 percent of the people employed in that area can trace their work to the lab somehow.

7/4/01

LANL

# Group launches 'Can-paign'

◆ *Watchdog hopes cans can contain additional nuclear waste build-up*

By ROGER SNODGRASS
lamonitor@lamonitor.com
*Monitor Assistant Editor*

The Los Alamos Study Group kicked off a new "can-paign" last week to raise the political costs for storing nuclear waste at Los Alamos National Laboratory. The lab says its own goal is to reduce the waste to zero, but admits that will be difficult.

LASG calls its campaign a "can-paign" because it involves ordinary tinned-food cans from the grocery store that have been re-labeled. The new labels call New Mexicans attention to what the groups sees as the discrepancy between the lavish funding for nuclear weapons programs and the perennial economic distress of the population as a whole.

GARY WARREN/Monitor

Los Alamos Study Group is selling cans to call attention to permanent low-level waste disposal at the laboratory.

The cans are sold for $3 by sponsoring businesses in Santa Fe and northern New Mexico with the idea that they are supposed to be delivered to Gov. Gary Johnson with the request that he forward the food to food banks and shelters, and that he direct the state's Environment Department to hold hearings on nuclear waste disposal and related clean-up issues.

The full package also contains a form post-card to be sent to the donor's congressional representative asking that the Department of Energy's nuclear weapons programs be investigated, and that further growth cease.

LASG's concerns are focused on two main objects — the expansion of on-site nuclear waste disposal (Area G at Technical Area 54), and the lab's major new role in producing plutonium "pits" — the ignition triggers at the core of nuclear bombs.

Citing DOE's Site-Wide Environmental Impact Statement for Continued Operation of the Los Alamos National Laboratory from January, 1999, Gregg Mello of LASG,

*Please see* **STORY**, *8*

# CANS Los Alamos Study Group launches "can-paign" to call attention to LANL waste

*From Page 1*

said Tuesday that the lab has mapped out two new plots, Zone 4 and Zone 6, northwest of Area G, which would add another 70 acres to the current 63 acres used for the indefinite storage of plutonium waste. Zone 4, according to a lab document, contains a number of Native American ruins.

Some of the newly generated waste, the transuranic waste, would eventually be shipped to the Waste Isolation Project Plant in Carlsbad, but some of it would not have enough plutonium content to qualify for WIPP, and would most likely be buried at Area G, said Mello.

There is currently no long-range plan for the final clean-up and disposal for the nuclear waste buried at Area G. Waste buried there is considered to be permanently disposed by the laboratory.

Two more expansion areas have been identified in the document as the North Site, just north of the western end of Area G, bordering an area that is designated sacred land for San Ildefonso Pueblo; and another very large area in TA-67, located about two miles due south of the administration complex, half-way to the edge of Bandelier National Monument.

James Rickman, a laboratory spokesman said, "The ruins won't be effected. We've had a very productive relationship with San Ildefonso Pueblo in our planning efforts. Sacred areas won't be effected."

Mello pointed out that the SWEIS estimates about a one-third increase of low-level radioactive waste from expansion of laboratory activities, from 9,130 cubic meters, per year, to 12,240 cubic meters per year, or 31,100 cubic meters over the ten years of the projection. Even that figure, said Mello, is four times the amount of low-level radioactive waste that DOE estimated only four years ago.

Ray Hahn, the lab's solid waste group leader said the SWEIS had estimated "a worst case scenario," and that in fact, far less waste is being generated than anticipated. At current levels, which he said were about 2,000 cubic meters per year, Area G could be used for another five years without expanding.

"The original environmental impact statement was based on the assumption that we needed additional disposal space quickly, because disposal efficiency was at about 25 percent," said Hahn. "Since then, programs have been put in place to increase efficiency up to 50-60 percent. At the current rate, the proposed expansionary areas would last another 50-60 years."

Disposal efficiency is based on oncentrating the volume. "The total amount of radioactivity is not changing," said Hahn.

LASG hopes their campaign will lead to new public hearings on the relationship between the state of New Mexico and LANL. State intervention at the laboratory might take the form of seeking to enforce the state Hazardrous Waste Act or invoking the federal Resource Conservation and Recovery Act.

The lab's goal, admittedly unattainable, is zero waste. "As long as we are mandated to do our national security work, we will generate a certain amount of waste," said Rickman.

"We're always going to have some," added Hahn, "but the less waste that we generate, the better off everybody is."

LASG wants future policies to be based on a full disclosure of the environmental and political costs of expanded plutonium pit production, which the group considers unnecessary in the current post cold-war climate. In an era of reduced tensions, said Mello, the nuclear stockpile should be reduced.

The Bush administration has indicated an interest in reducing the number of nuclear weapons unilaterally, as well as the number of weapon systems, but these policy changes have yet not reduced LANL's activities in designing and testing weapons components.

Seeking to connect with lab-dependent residents of Los Alamos, Mello said that the incremental increase of permanent nuclear waste on lab property would inevitably have an impact on any future economic activity in Los Alamos, whether as a retirement community or as a location for new high-tech companies. Additional waste disposal activities of LANL detract from any economic development based on healthy environmental amenities.

LANL sees its future in minimizing the expansion of low level nuclear waste disposal.

LASG is looking to see LANL achieve its goal by ending new waste generation altogether.

Santa Fe El Norte

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THE SANTA FE NEW MEXICAN

Sunday

JULY 15, 2001

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# Groups ready to fight dump proposal

▶ *'Triassic Park' east of Roswell would be state's first hazardous waste dump, but activists say New Mexico has enough toxic waste*

By KRISTEN DAVENPORT
The New Mexican

Santa Fe environmental groups are gearing up to fight a proposed hazardous-waste dump 40 miles east of Roswell that has been dubbed "Triassic Park."

Gandy-Marley Inc., a company based in Texas and southeastern New Mexico, is proposing to build a disposal and treatment facility over a square mile that would accept hazardous materials from across the nation — PCBs, lead, mercury, strychnine and byproducts of the petroleum industry. The site also would accept waste from American companies working in countries south of the border.

The dump would not be allowed to accept radioactive contamination, however. If approved by the New Mexico Environment Department, the disposal area would be the first hazardous-waste dump in New Mexico. Hundreds exist in other states.

The proposed facility would be buried in rock beds formed during the Triassic period, about 210 million years ago. Gandy-Marley officials say the area is good for a hazardous-waste dump because no aquifer exists there and thick layers of rock would hold disposal bins in place and keep them from leaking.

But some environmentalists — both in southeastern New Mexico and Santa Fe — say the state shouldn't approve the disposal site because New Mexico has enough toxic waste already, including the Waste Isolation Pilot Plant not far from the proposed Triassic Park. WIPP accepts only defense-related radioactive waste.

Also, environmentalists say, allowing

Please see **DUMP**, Page B-4

# DUMP

**Continued from Page B-1**

the hazardous-waste dump could open the site to possibly accepting low-level radioactive waste when the nation desperately needs a place to put spent nuclear fuel from nuclear-power plants.

"That whole corner of the state, we're calling it the toxic mall," said Joni Arends, director of Concerned Citizens for Nuclear Safety, a Santa Fe environmental group. "They're calling it Triassic Park, but this is a toxic dump, not an amusement park."

The Santa Fe environmental groups, including CCNS, Los Alamos Study Group and Citizens for Alternatives to Radioactive Dumping, are working with one of the only environmental organizations, Conservative Use of Resources and Environment, in the southeastern part of New Mexico to fight the dump.

Deborah Reade, with CARD in Santa Fe, said the groups are worried the dump will adversely affect the lifestyle of ranchers and farmers in the area. Also, she said, the Audobon Society has come forward to complain the area is habitat for the lesser prairie chicken, a bird with declining populations that has nesting areas on the site.

"They said, 'Don't worry. We're going to build in (protection),' but this is a lot of noise and noxious who-knows-what. It's a big proposed facility," Reade said.

Gandy-Marley already runs two petroleum landfarms at the site. A landfarm is a site where petroleum or other toxic sludge is spread across the ground and microorganisms are encouraged to break down the toxic chemicals.

Steve Pullen, with the state Environment Department's hazardous-waste bureau, is in charge of issuing draft permits for Triassic Park. Pullen said the site would be permitted to accept "a very long list of chemicals and compounds."

Largely, he said, the waste would come from the petroleum industry and high-tech industry in New Mexico and elsewhere. Also, waste would come from environmental cleanup operations in New Mexico.

The Environment Department's responsibility, he said, is to make sure Gandy-Marley obeys New Mexico hazardous-waste regulations.

"We have to make sure the applicant (Gandy-Marley) addresses all those regulations — how they are going to handle the waste, what will happen when the facility closes, plus hydrology and geology issues," Pullen said.

Pullen said the Environment Department had drafted a permit; now, the dump proposal must go before the public. Environment Secretary Pete Maggiore will make the final decision.

Pullen said the disposal site probably would not open New Mexico to having another area that would accept radioactive and nuclear wastes, as environmentalists fear. However, he said, the federal government decides what happens to radioactive wastes, not the state.

And, he said, the public should know that Triassic Park would be different from any old dump on the edge of town.

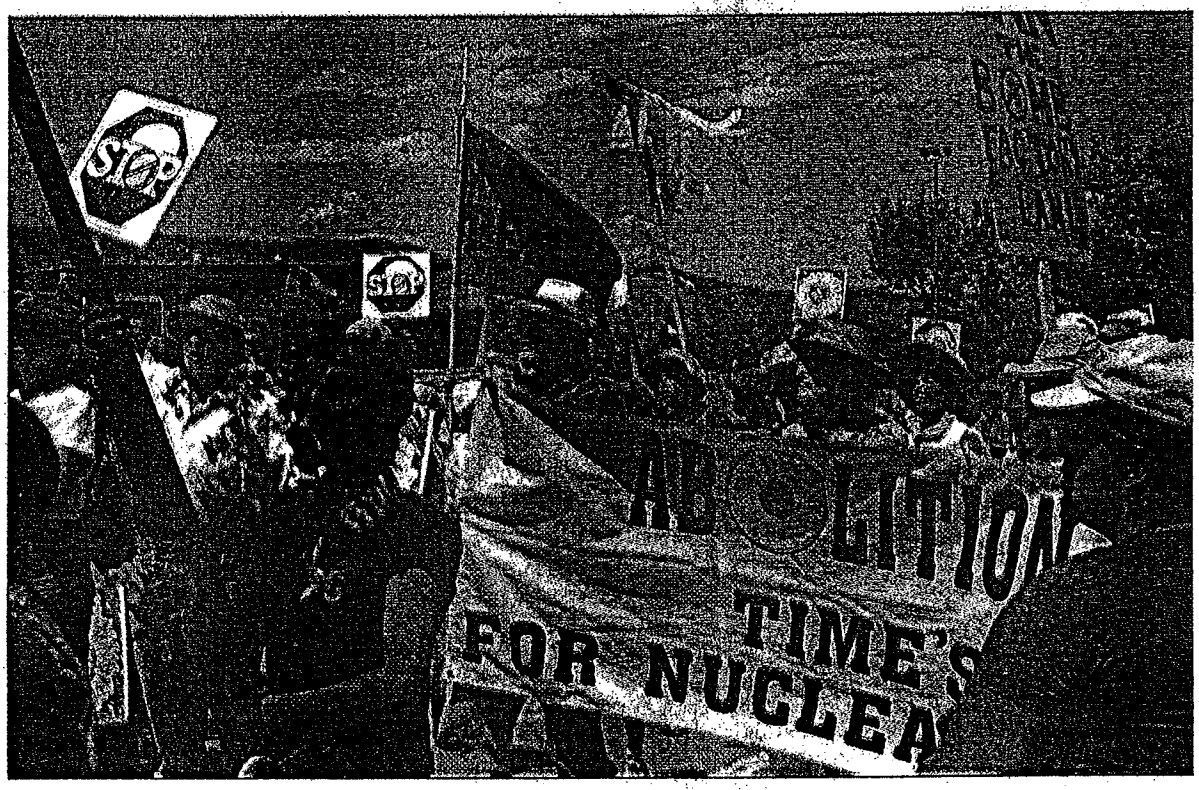
"They are storing contaminated waste and treating it, as well as disposing of it," he said. "I think the public is generally unaware of how comprehensive New Mexico's hazardous-waste regulations are. It is in my opinion the ... most protective set of regulations anywhere in the world. People think it's like the county dump on the edge of town, but it's far more controlled than that."

The first public-information meeting will take place in Santa Fe at 6:30 p.m. Monday at the state land office. More meetings will be held in Roswell, Tatum and Hagerman next week.

4/19/91

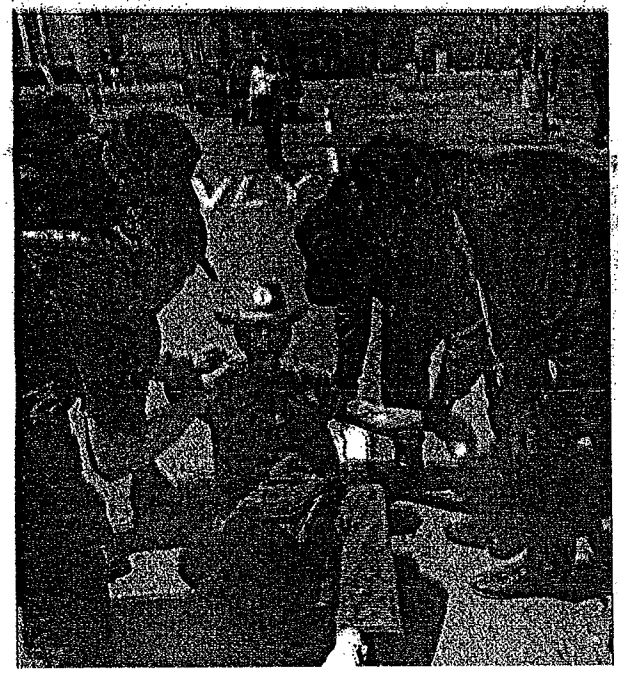
PEACE

# Activists take annual message to




**PEACE BRIGADE** Top, protesters banded together at Los Alamos National laboratory to demonstrate their opposition to nuclear weapons Monday afternoon. Right, demonstrators chant and jeer, as Rev. David McGown, of Santa Fe, below, is asked to leave by security. McGown was carried from the property, but released later, along with about 15 others who committed acts of passive resistance.

GARY WARREN/Monitor



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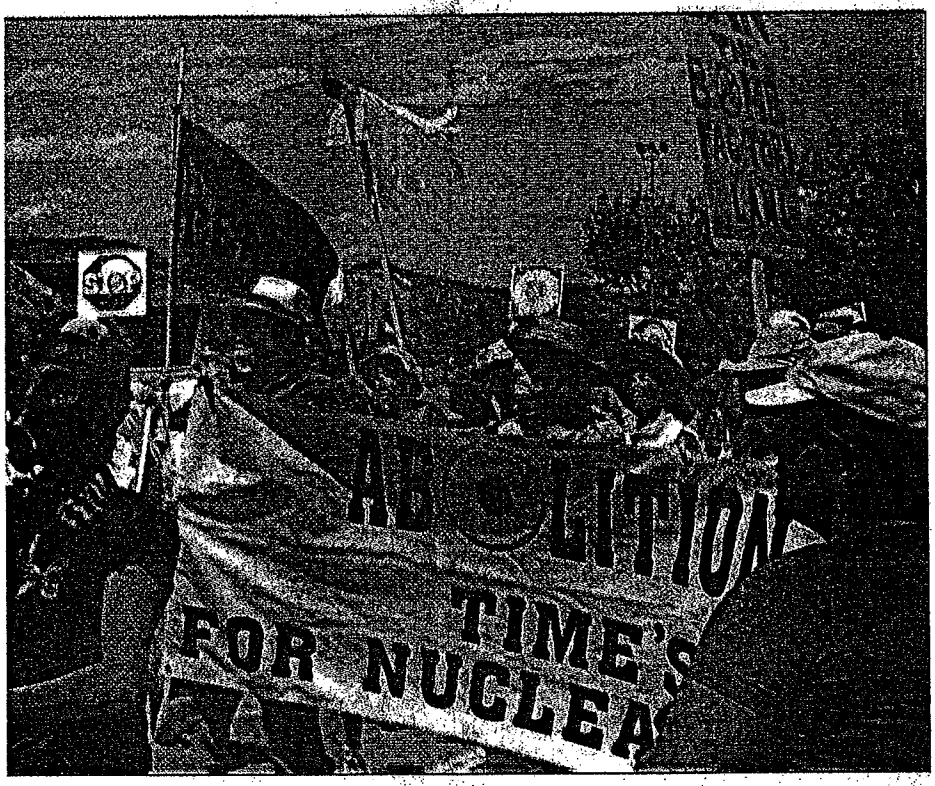
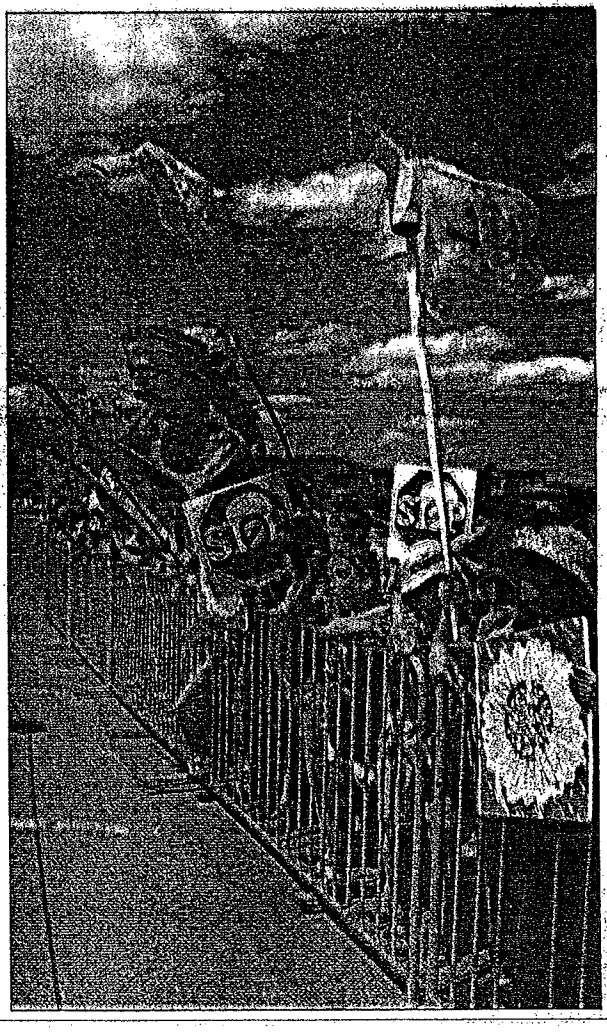



protesters banded together laboratory to demonstrate ear weapons Monday after- ors chant and jeer, as Rev. Fe, below, is asked to leave is carried from the proper- long with about 15 others passive resistance.

GARY WARREN/Monitor




◆ *Their numbers may be declining, but demonstrators remain enthusiastic in ritual protest*

**By ROGER SNODGRASS**
lamonitor@lamonitor.com
*Monitor Assistant Editor*

About 150 anti-nuclear demonstrators marched through town Monday on their way to Los Alamos National Laboratory. Some 15 were detained briefly after trespassing over a line on lab property, but all were released by the end of the day.

For the world's premier nuclear weapons laboratory protest comes with the job and is an exercise in volatile crowd containment. For the protesters, the annual peace march at Los Alamos is an act of communion and of conscience.

No matter how insulting the anger, the lab has learned how to overlook it, while channeling the venom into a relatively safe box of ritual. No matter how gingerly the activists were handled, many of them felt the need to be seen and heard, which meant being strident and, at times, provocative.

This year's march on Monday, the anniversary of the first nuclear test explosion at Trinity Site in southern New Mexico, was not on the usual date for the occasion. For about ten years the march has been held on Aug. 9, the date in 1945 when the Japanese city of Nagasaki became the second objective of an atomic weapon, three days after Hiroshima was the first.

For the last four years, the rally has been sponsored by Peace Action of Santa Fe.

This year another group, the Los Alamos Education Group, which defends the use of the atomic bombs for hastening the end of World War II, preempted both bombing dates, forcing Peace Action to hold their demonstration some three weeks earlier than usual.

Greg Mello, executive director of the Santa Fe-based Los Alamos Study Group, complemented the Los Alamos Education Group for their tactical victory in beating out the marchers for the commemorative dates in August.

"It's something I would have

*Please see* **MARCH**, *3*

# MARCH Activists reunited from around the country to focus attention on weapons of mass destruction

*From Page 1*

done myself," he said.

While fewer in number than in past years, the marchers were no less hostile to the "bomb factory," as one placard called it.

"The numbers are not as important as the act of expressing 'the conscience of humankind,'" said Mello, who added that his message was not to place blame, but to ask people "not to accept uncritically the technologies of power."

"It's sad and outrageous that we're still spending such great sums on weaponry," said Charles Powell of Albuquerque, a postal worker and an officer of the New Mexico Labor Party. "The money could do so much good for the country and the world."

The protesters gathered at Ashley Pond shortly after noon. They listened to folk singers, poets, and speakers who typically condemned the laboratory for it existence and commanded that it disappear.

There were young and old, men, women and children. They were from near and far, and a carnival-like atmosphere prevailed. Some men dressed in women's garb, making a statement about perversity. Other men and women wore ghoulish face paint. A red devil played the trumpet in the band.

Bishop Tom Gumbleton of Detroit, who spoke at previous rallies, advocated nonviolence.

Bruce Gagnon, from Florida, who heads the Global Network Against Weapons and Nuclear Power in Space, demanded to know, "Who the hell do we think we are to move the arms race into space? To take our bad seed up into the heavens is pure insanity."

With banging drums and clanging cymbals and a blaring parody of a marching band, the group circled a few times, gathering momentum. They picked up their pickets, banners, puppets and hand floats and made their way up Diamond Drive, across Omega Bridge and turned on West Jemez.

They funneled into the parking lot at the administrative area, where a single entrance and exit had been established.

Andrew Toupadakis, a chemist who left the lab three years ago, gave an impassioned speech, as he implored laboratory workers over a portable loudspeaker to join him in rejecting weapons work. He invoked the memory of Polish experimental physicist, Joseph Rotblat, who worked on the bomb at Los Alamos and the University of Liverpool, before dedicating his life to peaceful pursuits. Rotblat was awarded the Nobel Prize for Peace in 1995.

Gene Tucker, the lab's security chief, backed by several echelons of security guards, glared across the barricades, explaining that he just wanted to make sure they did what they said they would do.

"The visit was pre-coordinated," he said. "We established the groundrules."

Those rules prohibited climbing over the fences. A single point with a big sign designated the "gate," through which those who wished to commit civil obedience were allowed to exit one at a time.

Laboratory workers looked down from the comfort of the cafeteria, or stood in front of the building.

"We should have our own sign," one woman said: "Bombs Are Us."

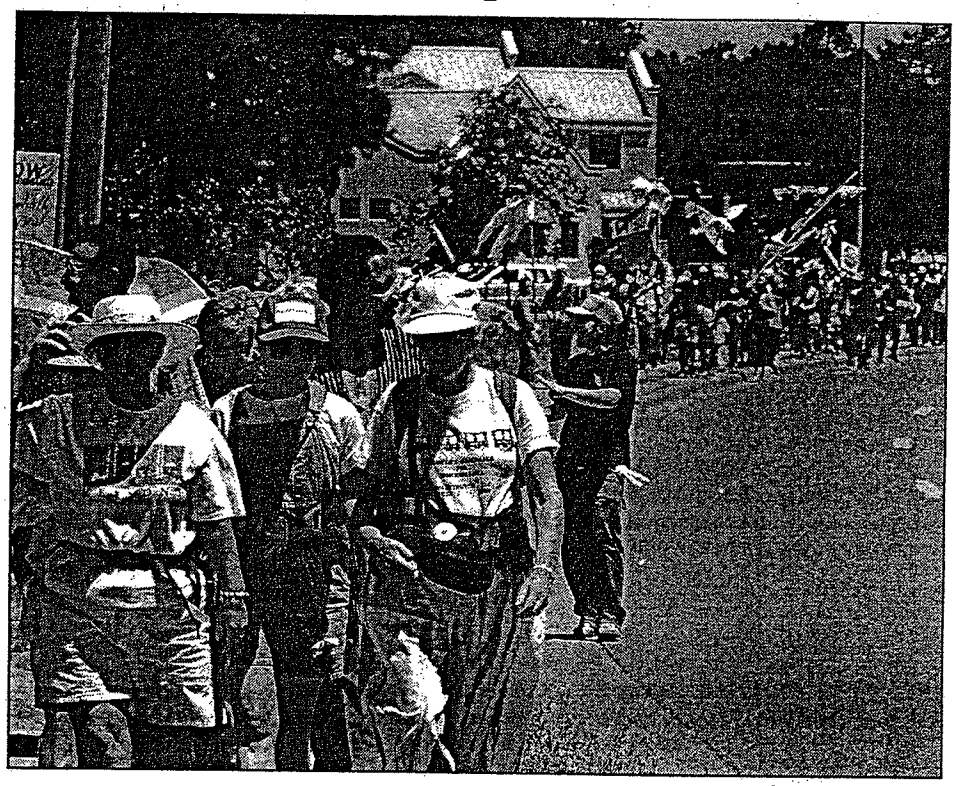
Several public affairs representatives were also on hand.

Rev. David McGown of Santa Fe, alone of the protesters, sat down in the street outside the barricade on Casa Grande Drive for about fifteen minutes before four guards gently hauled him off.

Tucker said those who crossed the line were risking fine or incarceration, but that they would be detained more or less depending on their behavior. "Their disposition will be based on their disposition," he said, noting that they were violating federal law and that there were U.S. marshals on hand to enforce it if necessary.

The lab reported afterward that about fifteen people were detained, but all were released.

"It's only three forty-five," said Tucker with some relief, as the last protestor came through the gate, and the others began heading back to town.



GARY WARREN/Monitor

**MARCHERS** From Ashley Pond, the marchers organized into a long line and marched to the laboratory to demonstrate their opposition to nuclear weapons work.