

Waste Found In Water

Tritium Traces In LANL Well

BY JENNIFER MCKEE

Journal Staff Writer

2/8/01

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

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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.

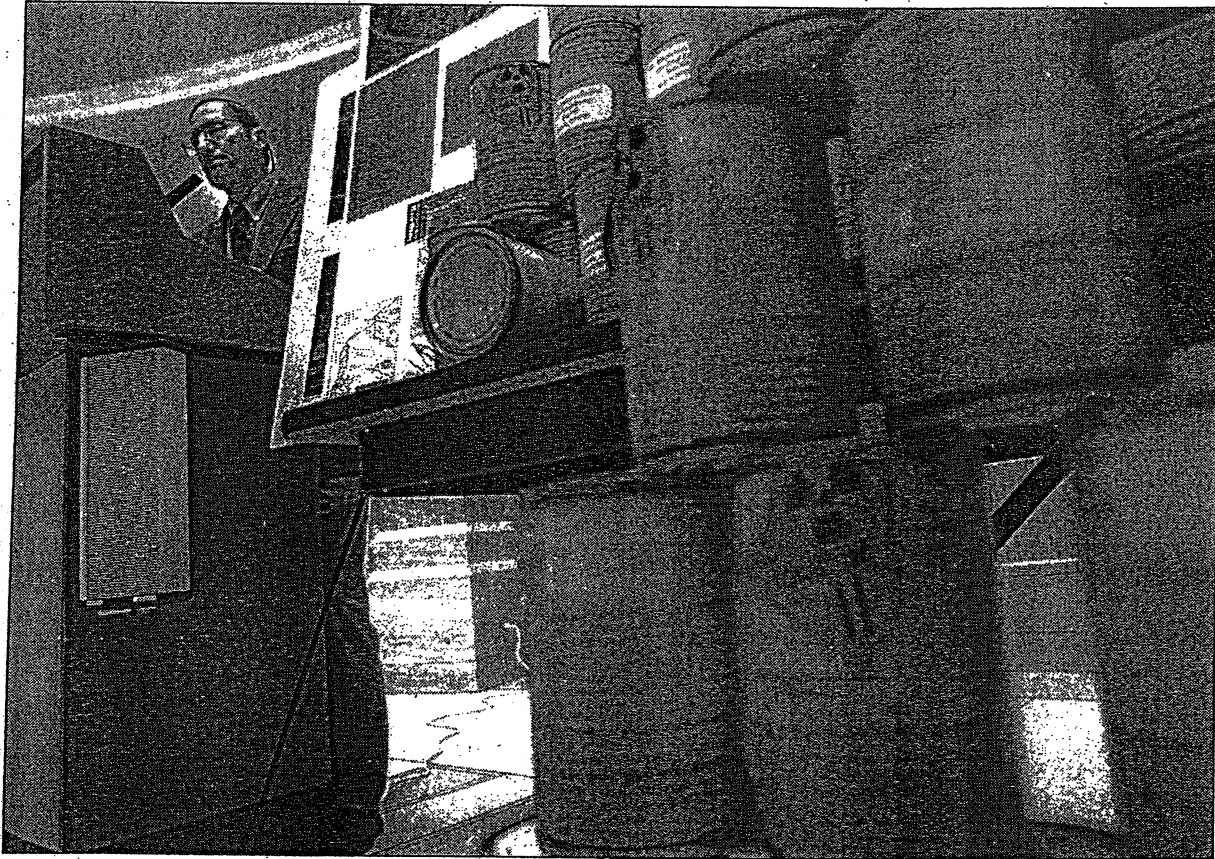
The tritium also could have trickled into the aquifer from some place else near the lab and merely ended up in the aquifer near Area G, Rick-

man 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.



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

4/29/01

Group using canned foods to protest nuclear-waste dump

By KRISTEN DAVENPORT
The New Mexican

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

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.

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 far-

ther 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

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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.

Activists Fighting Nuke Waste With Food

Canned-Good Protest Targets LANL Dump

BY JENNIFER MCKEE
Journal Staff Writer

6/29/01

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.

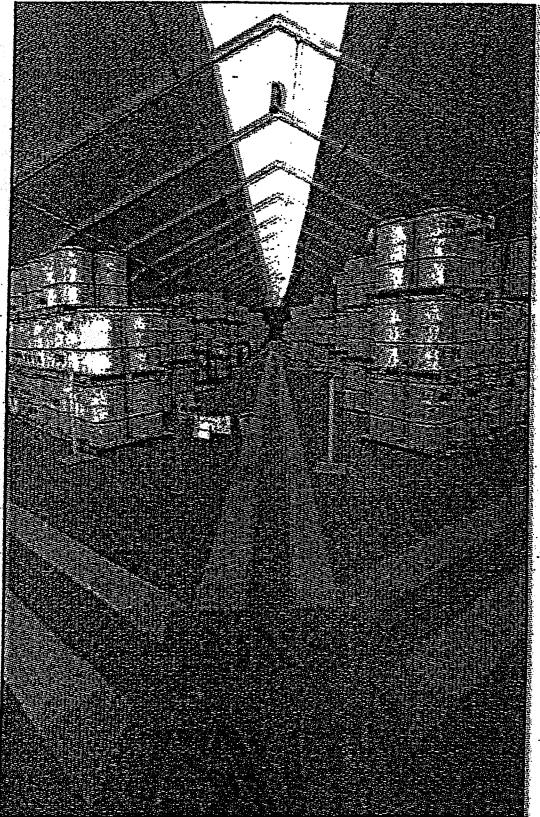
Mello said he hopes Johnson will deliver the cans to a local food bank to help the people who have not benefited from the more than \$1 billion in federal dollars spent at the lab every year.

"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.



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.

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LANL Nuke Waste Targeted

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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

"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

be removed before delivering to the hungry.

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,

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.

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

7/4/01

LANL

Group launches 'Can-paign'

◆ *Watchdog hopes cans can contain additional nuclear waste build-up*

By **ROGER SNODGRASS**
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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



GARY WARREN/Monitor

Los Alamos Study Group is selling cans to call attention to permanent low-level waste disposal at the laboratory,

whole.

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,

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CANS Los Alamos Study Group launches "can-paign" to call attention to LANL waste

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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 expan-

sion 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 dispos-

al 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 concentrating 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 Hazardous 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.