

Los Alamos National Laboratory is under pressure to clean up its act—that could be good news for



TONIUM RUNS ROUGH IT



ILLUSTRATION BY MICHAEL MORGENSTERN

National Laboratory is under pressure
is act—that could be good news for the Rio Grande.

AUGUST 11-17, 2004

www.sfrepor

SANTA FE

REPORTER

WEEKLY NEWS AND

PLUTONIUM RUNS THROUGH IT

Los Alamos National Laboratory is under pressure to clean up its act— that could be good news for the Rio Grande.

By April Reese Page 14

SFR TALK

Carol Miller explains why she's sticking with Nader. PAGE 10

J SPOT

Who knew? Second Street holds hidden treats. PAGE 24

PERFORMI

Lucky Seven Corea Trio + PAGE 31

BY APRIL REESE

The recent rains may be a welcome gift as northern New Mexico enters its fifth year of drought, but they're turning Pueblo Canyon into a conveyor belt for plutonium making its way toward the Rio Grande.

Ever since the Cerro Grande fire raged across the landscape four years ago, plutonium-laden sediments from Los Alamos National Laboratory (LANL) have been tumbling down the canyon—and toward the Rio Grande—at unprecedented speeds. For Pueblo Canyon, monsoon season is the worst time of year, bringing a torrent of water rushing across

burned, vegetation-less mesas that funnel runoff like glass. Along the way, the water picks up contaminants in the soil and flushes them through the canyon, eroding stream banks and carving out chunks of



For Pueblo Canyon, runoff after summer rains has had a large impact on soil erosion.

plutonium-laced earth along the way.

"These types of floods we're seeing now didn't happen in the past," says Ralph Ford-Schmid, an environmental specialist with the New Mexico Environment Department, the office charged with monitoring LANL's environmental effects and cleanup directives.

"The sediment load has increased, and in order to handle that, the stream channel has to deepen and widen," he adds. "As a result it's eroding many of those deposits that were laid down many years earlier."

While recent security lapses at LANL have provoked questions about the Lab's management, morale and future, the furor also is shining a light on the environmental issues at the Lab. For activists, it's attention long overdue. From plutonium in Pueblo Canyon to barrels of waste languishing on Lab grounds, LANL is under increasing pressure to clean up its act.

Los Alamos Study Group conducted a "citizen inspection" of LANL on Aug. 5, the eve of the anniversary of America's bombing of Hiroshima.

"These types of floods we're seeing now didn't happen in the past."

—Ralph Ford-Schmid

Pueblo Canyon begins in the ponderosa pine forests of the Jemez Mountains and cuts through the town of Los Alamos, LANL, and San Ildefonso Pueblo before merging with the Rio Grande. When the Lab was located on what is now the town of Los Alamos, the canyon was the primary—and at the time, legal—dumping ground for a litany of nasties, including plutonium, PCBs (polychlorinated biphenyls) and

4.25%



Marcel Legendre, Marcy Gonzales, Tony Ornelas—Vice President and Branch Office Manager, and Lisa Robinson are ready to help you at our Main Branch Office on the Plaza.

Home Equity Line

CALL US TODAY TO START
YOUR RELATIONSHIP REWARDS!

992-2000

trust
First National

VISIT ANY OF OUR EIGHT BANKING LOCATIONS: MAIN OFFICE ON THE PLAZA | CERRILLOS ROAD AT ST. MICHAEL'S DR. | CORDOVA ROAD SHOPPING CENTER

Based on a 10 year open-end credit line with a minimum monthly payment amount of the accrued interest. Credit is a variable rate based on J. P. Morgan Chase prime (currently 4.25%) plus a margin. The margin is currently 0.25% for an effective APR of 6.25%. The margin is based on the amount of equity you have in your home and the number of lines of credit you have. Maximum APR is 18%. No points, no appraisal fee and no annual fee. Maximum amount is \$10,000. An annual fee of \$50 is waived the first year. Property insurance is required. Existing credit line for an increase of \$5,000 or more. Member FDIC. Equal Opportunity Lender.

REAL ESTATE LAND

FEATURING 26 LOTS IN PAGO
AUGUST 27th 1:07P



25 Lots
14 lots selling ABSOLUTE,
regardless of price!
Most have beautiful 360 degree
Mountain and Lake views and
several have utilities.

1-877-612-8494 or 970-731

SANTA FE!
Tribal Arts
 CA • ASIA • OCEANIA
2004
LOCATION!
 Berger Tennis Center
 College of Santa Fe
 100 St. Michael's Drive
 (Just Off Cerrillos Rd.)
 Santa Fe, NM
Parking • FREE Shuttle
 Tennis Center Saturday and Sunday
 DAY 10am - 5pm
 THURSDAY 10am - 5pm
 DAY 10am - 3pm
 Admission \$10 (includes return)
ARTS PREVIEW RECEPTION
 benefits in part
 DANCE INSTITUTE
 OF NEW MEXICO
 Home - Everything for Sale!
 AUGUST 12 • 6:30pm-9:00pm • \$50
• QUALITY, EARLY MATERIAL
 jewelry, Western, Spanish Colonial,
 art and antiques ... and more.
 Manager • b4rTIME, Inc • 703.914.1268
 703.862.0914 • www.b4rtime.com



history!
and Territorial
exico
August 15, 2004
about his days
Kid
with the cowboys
justice
Ranch Preserve
justice in early
Robert Torrez
ent for the Humanities,
ax and New Mexico Arts

ANDRINAS
 PHONE 471-2261
 EXT 276 OFF I-25



PLUTONIUM RUNS THROUGH IT

various heavy metals. While the contaminants have been moving slowly down the canyon for years, the Cerro Grande fire cleared away natural hurdles like trees and other vegetation that kept movement at a snail's pace.

Samples collected in 2001 and 2002 from Pueblo Canyon, near the Lab's eastern boundary, had plutonium levels 100 times higher than what was reported by the Lab for the four years before the fire, according to NMED.

According to LANL estimates, there were approximately 1,000 millicuries of plutonium in canyon sediments before the fire. About 10 percent of that has been flushed out by increased runoff since the fire, Ford-Schmid says.

Other canyons also contain contaminated sediments, but as the primary dumping grounds for hazardous and nuclear wastes for two decades, Pueblo Canyon is the most polluted, he says.

This "legacy pollution" dates back to the 1950s and '60s, when LANL discarded radioactive waste directly into Pueblo Canyon. At the time, waste disposal was not subject to federal laws such as the Resource Conservation and Recovery Act and the Clean Water Act.

State and federal reports conclude that the contaminants do not pose a public health risk. That assessment is based on how the public uses the canyon: Only the occasional hiker wanders into Pueblo Canyon, and is highly unlikely to drink the turbid water.

"They're not going to put houses up there," says Ford-Schmid, adding that if the area ever was developed, a new risk assessment would have to be undertaken first.

But Joni Arends, director of Concerned Citizens for Nuclear Safety, says that when it comes to long-lived, radioactive substances like plutonium, which has a half-life of 24,000 years, even a small amount of pollution can be harmful under the right circumstances.

"Sixty-one years ago, this was a pristine environment," she says. "Now LANL says it's okay to flush plutonium down the canyon. Plants are going to pick it up, it's suspended in the air, it's in the water, which is drunk by animals. So by that reasoning, it is not okay."

Furthermore, she says, it's difficult to predict where the contamination will end up once it hits the Rio Grande.

"It could end up on the streambank in Albuquerque where some kid is playing," she says. "That kid is going to get a dose."



Joni Arends of CCNS co-authored a paper on the environmental and health aspects of the Cerro Grande Fire, which can be read at: www.nuclearactive.org/docs/fire4.html.

A coalition of organizations calling themselves the BE SAFE Campaign is calling on George W. Bush and John Kerry to discuss their positions on the US nuclear weapons facilities.

"Sixty-one years ago, this was a pristine environment."

—Joni Arends

And while the general public may not flock to Pueblo Canyon, San Ildefonso Pueblo, which encompasses a portion of the canyon, could use the area differently. According to State officials, the Pueblo has been involved in discussions about how to keep contamination in check. However, a scheduled interview with Pueblo officials to discuss San Ildefonso's perspective on the contamination in Pueblo Canyon was canceled prior to publication of this article.

Danny Katzman, a technical staffer with LANL's Earth and Environmental



A public Los Alamos Study Group August 2 meeting was the precursor to an overhead tour of LANL several days later by citizens.

COVER



PLUTONIUM RUNS THROUGH IT

POSADA
E'S ONLY
TOWN SPA
WAY

day and Wednesday
es

OS
LE
IONS

SPA

N
Steam Rooms
Body Treatments
Valet Parking
osadadesantafe.com

A FE INSTITUTE
URES PRESENTS

L Lifespans:
economics
Life Course

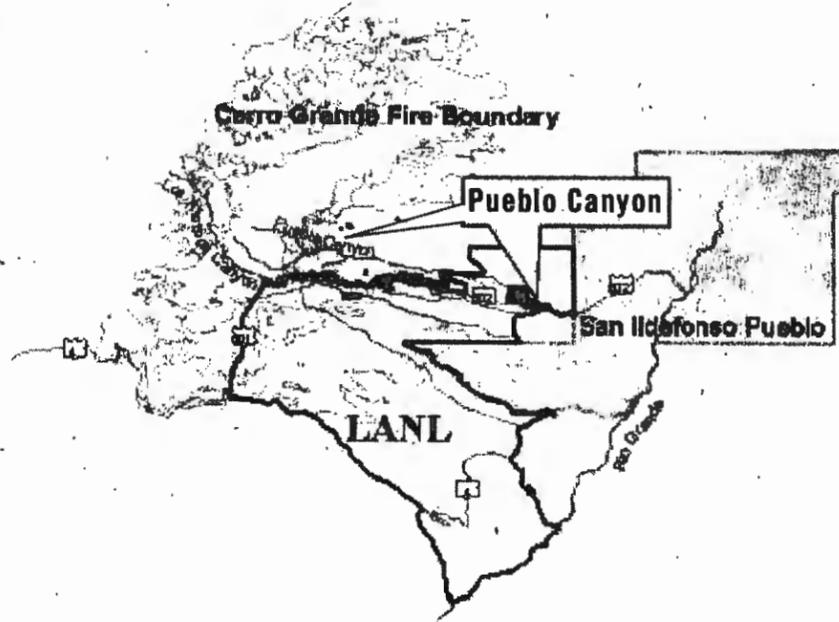
Humans are distinctive
is are: our exception-
y long lifespan; an
-generational resource
reproduction; and
g. This talk offers an
acteristics, their
ther.



chologist



COVER



Sciences Group, says the Lab and the State have determined that containing the pollution is the best way to handle it.

"There has been no discussion of removing the contaminants, largely because our data to date are showing that there's no human health risk associated with these sediments," Katzman says.

Ford-Schmid agrees. "Levels aren't high enough to merit removal, based on this risk assessment," he says. Even if they were, NMED does not have the regulatory authority to force the Lab to take action, he adds.

"It's out of our purview to tell them whether to clean it up," he says.

Katzman says the Lab is committed to getting the contamination under control and will pay for the work.

Nevertheless, Lab watchdogs who have seen the facility fight previous NMED directives say they can't help but wonder whether LANL will follow through.

"They've done very little in the past," says New Mexico Environment Department Secretary Ron Curry, who worked as a contractor for the Lab in the mid-1990s.

For instance, the State fined LANL \$1.4 million in February for hazardous waste violations discovered in 2003. It was the 14th such compliance order NMED has issued to LANL since 1993.

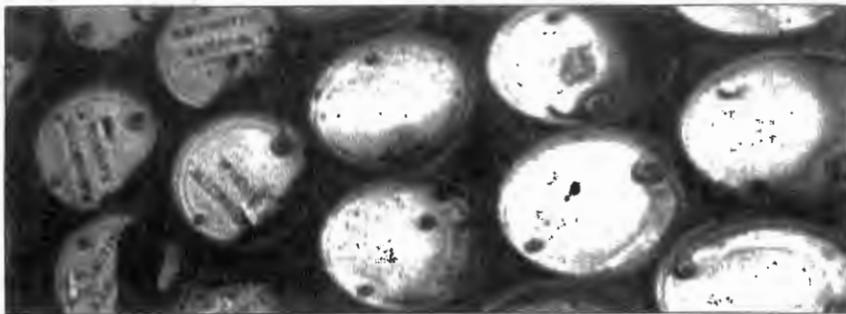
The Center for Disease Control has been conducting the first phase of what is known as a dose reconstruction at LANL. It's unclear if the project will continue. So far, the CDC has found the soil around LANL could contain 100 times more plutonium than previously stated.

"The Lab's approach to the State of New Mexico is like, 'Go away kid, don't bother me right now.'" —Ron Curry

NMED has no regulatory authority to force LANL to implement the project. But the spotlight the Lab is under to clean up its act—on multiple levels—is likely to pressure Lab officials into doing the right thing, observers say. That makes sense to Ares, who believes environmental protection is a national security issue.

"What is national security if we don't have clean water, clear air, clean soil?" she says.

The current shutdown the DOE ordered after two computer disks went missing has put greater scrutiny on all of the Lab's activities, including its environmental



problems, says Gene Turner, LANL's environmental permitting manager.

Turner says a re-evaluation of the way the Lab handles environmental challenges will be part of a larger, Lab-wide assessment that is now under way. "It's essentially tearing everything down and building a new way of doing business," he says.

That means the Pueblo Canyon containment proposal will probably be put on hold for a while. But in the long run, the Lab may be better prepared to address environmental challenges, he says.

Meanwhile, NMED is trying to gain full regulatory authority over LANL's environmental practices. "The Lab's approach to the State of New Mexico is like, 'Go away kid, don't bother me right now,'" Curry says. "We're trying to change that."

If NMED succeeds, it will be in a position to enforce containment of pollutants in Pueblo Canyon, he adds.

While the containment proposal is still in the works, NMED has a few ideas about how to put the brakes on the contaminants. Replanting trees, grasses and other vegetation on bare soils exposed by the fire will help stabilize streambanks and absorb some of the pollution, Ford-Schmid says. Strategically placed "check dams" will help trap sediment. And "roughing up" floodplains will tame flows as well, allowing contaminated sediments to drop out and stay put, he says.

But he emphasizes the project will involve some trial and error.

"We're not sure what will work and what won't," Ford-Schmid says. "It's not something we can just jump in and fix."

A price tag for the project has not been determined.

Joni Arends of Concerned Citizens for Nuclear Safety says the Lab's efforts may be too late to contain much of the contaminated sediment, which she suspects has already been carried to the Rio Grande.

"They [LANL officials] are saying they're going to address the problem—now that it's gone," she says.

According to a study released by NMED in January, erosion problems are spreading upstream toward the upper part of the canyon, where most of the pollution is concentrated.

Ford-Schmid says no one knows for sure how much plutonium has reached the Rio Grande, a likely future source of drinking water for Albuquerque and perhaps Santa Fe. But on the other end of the waste stream, the levels that are flowing off of LANL property into Pueblo Canyon are comparable to levels from the 1950s, when the Lab was in full nuclear weapons manufacturing mode, he says.

And every new storm can bring more problems, he says. When NMED went into the canyon to examine the damage from the most recent storm, they found erosion in new places. "Areas we thought were in good shape are now getting worse," he says.

"All we can do is slow it down," Ford-Schmid says. "That's our goal."

SFR



NMED Secretary Ron Curry wants regulatory authority over LANL's environmental practices.

In April, NMED found elevated levels of tritium in several springs along the Rio Grande in White Rock Canyon. Although they were well below the levels the Environmental Protection Agency considers of concern, NMED characterized the finding as another example of the Lab's impact on groundwater and the Rio Grande.

SFR

Georgia O'Keeffe and A SENSE OF PLACE

The first-ever retrospective of O'Keeffe's

JUNE 11 - SEPTEMBER 12



GEORGIA O'KEEFFE, PART OF THE CLIFFS, 1937. OIL ON CANVAS, 20"

Georgia O'Keeffe Museum

217 Johnson Street, Santa Fe, New Mexico 50506

EXCLUSIVE MEDIA SPONSOR: WESTERN INTERIOR

SHOHKO-CAFE
Authentic Japanese
Cuisine Since 1976



Under New Management

Hiro &
Shohko
are back!

Hiroyuki Hirose, Owner
Shohko Hirose, Manager

982-9708

2801 Cerrillos Road, Santa Fe, NM 87505

PETE'S

1st Anniversary

Friday, September 12
August

- ★ Everything in the store
Food is 10% OFF, and
 - ★ Perfecto 55 Gallon
(regular low price \$89.99)
 - ★ Blue Ribbon Parakeet
14" x 16" x 22"
\$33.88 (regular low price \$39.99)
 - ★ Superpet 3 Level Feeder
32" x 20" x 21"
\$69.88 (regular low price \$79.99)
 - ★ Perfecto 20-Long Tapered
(regular low price \$89.99)
- 2801 Cerrillos Road