

A Rap Sheet on UC Management at LANL Or, kid, have you completely rehabilitated yourself?

On July 15, 2004, Los Alamos National Laboratory (LANL) was ordered to stand down all but the most essential operations. This was due to the loss of two pieces of classified data and to a laser accident. These recent scandals are only the latest evidence of University of California's (UC) mismanagement at the Lab. In report after report, investigators have nailed the Lab for problems ranging from safety hazards, to security lapses, to environmental violations and to administrative failures. For instance, in February 2004, the Government Accounting Office (GAO) reported that breakdowns in management controls at LANL are analogous to those found at NASA, which led to the 2003 Space Shuttle accident. A key finding of the Columbia report cited NASA agency "culture" as contributing to the shuttle accident. The GAO was concerned that LANL has a similar agency culture that emphasizes programmatic concerns over safety concerns.

Widespread problems continue to reach into every corner of LANL. Recent disclosures by the Defense Nuclear Facilities Safety Board (DNFSB) state that even the very welds holding LANL together are suspect. Several 2004 LANL reports identified welding processes used on site that have not complied with national codes. LANL intends to implement a compliant welding program, now. This issue, like many others, begs the question -- what were they waiting for? Does it take an accident for UC to dip into \$2 billion-plus per annual budget year to fix a LANL problem?

Historically, accident and security problems have not seemed to get UC's attention enough to affect any real change at LANL. "Frankly, nobody understands how we have gotten ourselves into this mess," LANL Director Pete Nanos wrote after he ordered the stand down. Where has he been? The real question is if UC can ever manage LANL effectively enough to achieve a state where safety and security issues are driven more by insightful planning and less by events, such as accident investigations and security losses.

The following is a list of incidences at LANL in the broad categories of security, safety, the environment and management. This extensive rap sheet begs the question of why the University of California should be allowed at all to try again in managing the Lab.

SECURITY

<u>Sept. 04</u> LANL fires four employees over July 2004 incidents. Three of the workers will leave the lab in connection with the missing computer disks; the other one was involved in the laser accident.

Jul. 04 The Department of Energy (DOE) orders nation-wide halt to all classified computer disk operations. This shut down, costing untold millions of dollars affects an estimated 20 DOE sites and is directly due to LANL's recent loss of classified removable data-storage devices.

Jul. 22/04 Lab places 19 employees on leave. 15 of the workers were suspended because of the two computer disks that were discovered missing July 7. The other four employees were put on leave because of the laser accident. Jul. 19/04 Secret information at LANL was repeatedly sent over the Internet.

Jul. 17/04 All work suspended at Los Alamos National Laboratory.

Jul. 7/04 LANL Loses Track of Classified Data. The Lab affirmed that two classified pieces of computer material simply couldn't be found. When the items were searched for, "they weren't where they were supposed to be," a lab spokesman said.

Dec. 03 Annual inventory discovers 10 pieces of classified media missing. Initial Lab review indicated that national security was not jeopardized by this incident. However, on December 10, UC officials ordered an immediate halt to some computer operations after the Lab said that the 10 missing computer disks were marked "classified."

Jun. 03 Laboratory discovers undisclosed nuclear material accounting discrepancy.

<u>Feb. 03</u> Inability to confirm that all Lab-owned firearms are accounted for.

<u>Feb. 03</u> **Reporter sneaks into LANL undetected**. The freelance writer stated, "All you do is step over a few strands of rusted, calf-high barbed wire."

Jan. 03 Computer hard drive with classified data reported missing. It had been missing since October 2002, but top officials at DOE failed to investigate the loss. Sept. 02 Internal Los Alamos document proves cyber security lapses long known.

<u>Sept. 00</u> Wen Ho Lee is set free. This LANL employee for 20 years is set free with an apology from a judge; nine months after the US government branded him a threat to

551 West Cordova Road #808 Santa Fe, New Mexico 87505 505.989.7342 Fax 505.989.7352 info@nukewatch.org www.nukewatch.org

Security continued.

national security and put him in solitary confinement.

Jun. 00 Two missing hard drives containing classified information causes stand down. On June 13, LANL the director states, "The Laboratory has made great strides in improving our security program and those improvements have been validated in exhaustive DOE and outside audits." On June 14, several managers were placed on leave with pay. Hard drives later found behind a copier in a room that had been repeatedly searched before.

May 79 The Lab erroneously declassified information.

<u>Aug. 04</u> **DOE releases TA-18 draft closure plan.** Plan is to run potentially dangerous criticality experiments until 2009. Plan also leaves an estimated 20 tons of natural and depleted uranium in TA-18's canyon, which is a flood plane.

Jul. 04 TA-18 is shut down for safety violations.

Jul. 04 National Nuclear Security Administration (NNSA) finds that LANL can not ensure personnel meet minimum qualification requirements.

July 04 LANL suspends solid waste operations at TA-54 Area G. Receipt of on-site waste was suspended when it was discovered that the total aboveground transuranic waste inventory was about 56% higher than expected.

<u>May 04</u> Screwdriver used to bypass safety interlock at TA-8.

<u>Nov. 03</u> Phone failure risks fire and emergency operations. Some Lab facilities call '911' for site-wide fire alarm system. LANL begins implementing an interim safety program until longer-term improvements can be implemented. Defense Nuclear Facilities Safety Board (DNFSB) stated, "Success is not assured."

<u>Sept. 03</u> TA-55 plutonium facility stood down after five workers exposed to Freon vapors. Weld at the Radioactive Liquid Waste Treatment Facility leaks 300 gallons of transuranic waste.

<u>Sept. 03</u> Blue glow at TA-16 tritium processing room. Personnel observed lightning above TA-16 and near simultaneously, a blue glow or flash in a processing room. <u>Sept. 03</u> Workers cut locks, have 13.2 thousand volt electrical near miss.

<u>Aug. 03</u> Worker contaminated with Plutonium (Pu)-239 while dismantling glovebox. Speculation centered on the window gasket, which had been merely taped over. <u>Aug. 03</u> TA-48 restarts after an "acid-to-the-eyes" incident, and then suspends work again when a worker received skin contamination.

Aug. 03 Two workers contaminated at TA-55 with the

Detailed information on how to design a thermonuclear weapon was found in the Los Alamos public library.

<u>Apr. 80</u> 78 % of Lab security personnel failed a test of required skills.

<u>1997</u> Technical Area (TA)-18 failed a security exercise in which Army Special Forces acted as mock terrorists, "killed" most of the security guards and "stole" enough nuclear materials to make a bomb after pretending to load them on a K-Mart garden cart.

<u>1996</u> A discrepancy is revealed between DOE accounting and LANL accounting of 765 kilograms of plutonium, the equivalent of 150 nuclear weapons.

SAFETY

yet more dangerous Pu-238. The failure was similar to previous container failures that had been the subject of well-known reports since 1994. The contaminated room is still not cleaned up.

<u>2003</u>: NNSA finds that LANL had 45 violations of Technical Safety Requirements for operating nuclear facilities, a four-fold increase above the average of previous years.

<u>2002</u>: Approximately one-half of LANL facilities are in a poor/failure condition according to NNSA's FY02 appraisal of LANL.

Nov. 01 LANL received unauthorized virulent anthrax shipment.

<u>Feb. 01</u> **Two workers receive serious radiological contamination** (again Pu-238) at the TA-55 plutonium pit production facility. DOE Inspector General (IG) found that LANL failed to accurately and fully report on the incident.

Jan. 01 Tritium released at Technical Area 16. Approximately five curies of tritiated water vapor and approximately 1,000 Curies of tritium gas were released.

Jan. 01 NNSA cited LANL for nuclear safety violations. A civil penalty of \$605,000 would have been assessed; bust UC is exempt because it is "non-profit."

<u>Mar. 00</u> Eight Workers contaminated at TA-55 plutonium facility.

<u>Sept. 99</u> DOE cites Lab for nuclear safety violations at Chemical and Metallurgical Research Building (CMR) building.

<u>Feb. 99</u> TA-52 placed in stand-down mode for several safety incidents.

<u>Aug. 98</u> Lab places TA-18 in stand-down mode as precautionary safety measure.

Jun. 98 Settlement of personal injury lawsuit announced. This included a payment of \$13 M to the family of Efren Martinez; who was operating a jackhammer that struck a buried electrical power cable. The incident occurred Jan. 17, 1996.

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May 98 Leaking gasoline truck causes evacuation at Los Alamos TA-55.

Sept. 97 Work suspension ordered at CMR Building for safety reasons.

Jun. 97 Two LANL employees receive radioactive dose. Apr. 97 Laboratory stands down construction of the Hydrodynamic **Dual-Axis** Radiographic Test (DARHT) Facility for safety reasons.

Dec. 96 DOE reports that LANL has two of the ten most vulnerable facilities that contain highly enriched uranium. Nov. 96 Serious explosion at the CMR.

Oct. 81 Plutonium leak contaminated 15 workers.

ENVIRONMENTAL

Sept. 04 The New Mexico Environment Department (NMED) releases final draft of "Order on Consent," hopefully leading to State-mandated cleanup after years of declining cleanup funding at the Lab.

Aug. 04 Report states that Lab waste has reached Rio Grande. Low concentrations of explosives and perchlorate have already reached the river from LANL.

Apr. 04 Environment Department finds tritium in White Rock Springs. This provides further evidence of need for comprehensive LANL cleanup.

Feb. 04 NMED fines LANL \$1.4 Million for hazardous waste violations uncovered in 2003 inspection. This is the 14th compliance order NMED has issued to LANL since 1993.

Feb. 04 NMED fines LANL \$854,087 for hazardous waste violations uncovered in 2001 'wall to wall' inspection. Jan. 04 Environment Department collects \$282,033 from LANL to resolve numerous environmental violations found during surprise 1998 inspection.

Oct. 03 Los Alamos disclosed improper radioactive PCB disposal at TA-54 Area G.

Oct. 03 LANL suspends shipments to the Waste Isolation Pilot Plant (WIPP). LANL may have shipped several drums to WIPP without certifiably demonstrating they were transuranic wastes.

Oct. 27/03 LANL radioactive seepage reached the Rio Grande. Low levels of radioactive cesium-137 detected along the Rio Grande.

Apr. 03 NMED orders LANL to cleanup hazardous materials at Los Alamos Airport landfill. Soils contained elevated levels of cesium, plutonium, Polychlorinated Biphenyls (PCBs), pesticides and lead. The site had no erosion controls to prevent contaminated soils from reaching the Rio Grande, nor was the site fenced to restrict public access.

Mar. 03 NMED concerned with lab's impact on NM water resources. This is due to a series of recent findings including the discovery of previously unknown springs with elevated levels of perchlorate, chloride, nitrate, tritium and uranium that discharge directly into the Rio Grande.

Jan. 03 Tritium, nitrate and perchlorate discovered in a State-mandated monitoring well in Mortandad Canyon.

Nov. 02 NMED issues a Finding of Immanent And Substantial Endangerment to health and the environment caused by Lab operations in a Corrective Action Order against LANL. DOE and UC file four lawsuits against that Finding and Order (now settled).

Jun. 02 LANL pays a \$165,000 penalty to NMED for Hazardous Waste Law violations.

May 02 Cerro Grande Fire burns 48,000 acres, 7500 acres on Lab property. The Lab is shut down for 10 days and the Los Alamos town site is evacuated. LANL failed to analyze the risk of wildfire in a 1999 LANL Draft Site Wide Environmental Impact Statement (SWEIS), but did so in the Final SWEIS only because of strong public comment. When the Cerro Grande Fire did break out, it closely matched the wild fire scenario in the Final SWEIS. Feb. 02 Lab lost up to 48,000 gallons of diesel fuel at TA-21 because of a leaky pipe.

Jan. 02 Stormwater samples collected by NMED find plutonium-239 levels about 100 times the levels that the Lab reported between 1995 and 1999 (pre-Cerro Grande Fire).

Jan. 01 Lab reported 50-gallon radioactive water spill at the Defense Programs (DP) Site.

Oct. 00 Tritium detected in Los Alamos County drinking-water-supply well.

Jul. 00 Perchlorate detected in Los Alamos County drinking-water-supply well.

Mar. 00 Lab detects perchlorate in shallow groundwater in Mortandad Canyon.

Jan. 00 500 to 1000 gallon spill of high-explosivescontaminated water at TA-16.

Jan. 00 NMED issues a compliance order to LANL, proposes a penalty of \$845,990.

Nov. 99 Lab finds tritium in Mortandad Canyon surveillance well.

Jan. 99 High explosive contaminants found in deep groundwater water samples, 4 times the EPA recommended health level.

1999 to present "Low level" radioactive wastes disposed at Area G, TA-54 after expiration of permit, which has been "administratively extended" by NMED since then. Dec. 97 Lab personnel find tritium in perched

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Environmental continued.

aquifers. Lab states that saturated areas are segregated from the main aquifer by impermeable geologic formations.

<u>Sept. 97</u> LANL stated that pre-1960s plutonium had moved beyond its boundaries. From Los Alamos Canyon, sediments make their way to the Rio Grande and Cochiti Reservoir.

Jan. 97 **LANL settles citizen's suit.** The lab admitted that 31 of its 33 major stacks emitting radionuclides to the air were not in compliance with the Clean Air Act for over six years.

<u>Apr. 96</u> **Investigation showed the incidence of thyroid cancer in Los Alamos County rising** to a statistically significant fourfold elevated level during the late-1980s and early-1990s.

Jan. 95 NM District Court finds LANL in violation of the National Environmental Policy Act (NEPA) and orders that an environmental impact statement be prepared for a major nuclear weapons design facility.

Oct. 93 Tritium found in Los Alamos County and San Ildefonso Pueblo groundwater wells (deemed unusual because the groundwater was thought to be 1000 years old). Feb. 93 Tritium-contaminated water leaks from Omega

West Reactor. Amount and duration of time is unknown. Jan. 93 NMED issues to LANL two Compliance **Orders.** These are for WIPP wastes at Area G and storage, labeling, etc. at several locations.

<u>Sept. 92</u> Environmental Protection Agency (EPA) gives Notice of Violation to LANL for Land Disposal Restrictions.

Jun. 92 EPA cites LANL for inadequate storage of WIPP-bound mixed wastes.

<u>1992</u> LANL press release claims that radioactivity from the Lab had never been detected in the Rio Grande. It later was revealed that the Lab was playing semantics because plutonium had previously been found in the mud of the Rio Grande, not in the river water itself (plutonium is not soluble in water).

<u>1997</u> **Dept. of Labor rules that LANL retaliated against a Clean Air Act whistleblower.** It ordered the Lab to raise his salary retroactively and pay \$49,000 in legal fees.

Nov. 92 EPA issues second Clean Air Act Notice of Violation to LANL.

Nov. 91 EPA issues first Clean Air Act Notice of Violation to LANL.

<u>Up to the mid-1990's</u> Lab personnel consistently propagated the myth that deep groundwater contamination was impossible because of the "impermeable" tuff above it.

ADMINISTRATIVE

<u>Aug. 04</u> **DOE's Office of Inspector General** reports that LANL overpaid subcontractors. The report questioned \$12.9 million in costs paid to subcontractors at Los Alamos.

<u>Nov. 03</u> **Price Anderson reviews find more problems.** The number of PA reviews were 14 % more than 2002 and 56 % more than 2001. This appears due to better reporting and not to an increase in problems. The problems existed before.

<u>Apr. 30/03</u> **DOE announces it will take bids for LANL contract.** Given the widespread nature of the problems uncovered at LANL, DOE will open the management of Los Alamos to full competition before the contract expires in September 2005.

Jul. 03 NNSA explains, "Spill your guts." The NNSA Administrator explained a "misinterpretation" – When Lab managers instructed employees to "resist the temptation to spill your guts" to FBI agents investigating fiscal abuses, they really meant to "caution against providing information in areas beyond an individual's responsibility."

<u>Feb. 03</u> LANL employee improperly sells licenses to unclassified computer codes from 1992 until 1999. Lab changes policy after the employee collected \$100,000 off the books. 2003: LANL makes a "mistaken" \$99 million Dec. 02 Purchase card external review released. \$457,000 remained unresolved.

<u>Dec. 02</u> **DOE and Domenici press UC to shape up Lab.** And the FBI, the DOE's IG and two congressional committees investigated allegations of fraud, theft and cover-up.

<u>Nov. 02</u> **LANL fires two whistleblowers** after someone delivered their reports outlining widespread theft and fraud at the Lab to a national watchdog group. Whistleblowers later completely exonerated and receive a reported \$1 million in settlements.

Nov. 02 Lab had unaccounted material inventory, in 2002, in excess of \$1 million.

Oct. 01 Laboratory reaches \$8 million settlement in tissue analysis case. The Lab acknowledged that express consent to use autopsy tissue between 1959 and 1980 may not have been obtained from next of kin.

<u>May 98</u> Lab announces settlement of reduction in force lawsuit for \$2.5 million. Equal Employment Opportunity Commission finds that Hispanics had been unfairly targeted for layoffs.

payment to the Internal Revenue Service.