



LAB NUKE OPERATIONS STAND-DOWN: Programs Should Not Resume Until Proven Safe!

In July, following the **loss of more classified electronic materials and a laser accident**, Los Alamos National Laboratory (LANL) Director Pete Nanos ordered all Lab operations **“stood down”** (it costs taxpayers \$6 million per day to run the Lab or, in this case, not run the Lab). In his announcement to employees, Nanos said “In no case will I authorize a restart until I am absolutely convinced that each organization will not risk further compromise of safety, security and the environment.” He further stated that all Lab personnel had to pledge to the new motto “I will not violate LANL’s safety, security or compliance requirements, nor tolerate those among us who do.” Nanos decried the sloppiness or negligence of a few lonesome **“cowboys”** as the source of the problems. However, this seems to follow the historic pattern of Lab senior management pointing their fingers at subordinates while rarely accepting any blame of their own.

Talk about cowboys! In May, the independent Defense Nuclear Facilities Safety Board (DNFSB) reported that “The annual update requirements for safety bases at LANL are not being enforced” and have “rarely occurred for LANL nuclear facilities,” despite the fact that they are explicitly required by law. **This failure to have approved safety bases for operating nuclear weapons facilities can only be laid at the feet of top management.** Of perhaps the greatest interest, the Board reported: “Plutonium Facility (TA-55): The TA-55 safety basis is about 7 years old and has had no annual updates approved in that period.” The Board further observed that the facility’s worst case accident scenario involving a plutonium fire **could cause an 800 rem offsite dose, when 500 rem is considered to be fatal.**

TA-55’s Plutonium Facility is the nation’s only site for plutonium pit production. The former production site, the notorious Rocky Flats Plant in Colorado, experienced numerous plutonium fires and finally ceased operations following a 1989 FBI raid investigating environmental crimes. It is incomprehensible that LANL’s plutonium pit production facility, regarded as *the* critical production site

in the nuclear weapons complex, has not had an approved safety basis for seven years, especially after numerous DOE pronouncements to the effect that “lessons learned” at Rocky Flats were never to be repeated. Moreover, the lack of a safety basis for LANL’s pit production facility is not an isolated case. In all, the DNFSB reports that **16 out of the 26 nuclear facilities at LANL have not updated and/or completed their safety bases**, including LANL’s largest nuclear facility (which had a room-sized explosion in November 1996).

These safety bases are not just abstract procedural requirements. As the relevant Code of Federal Regulations puts it: “The safety basis requirements of Part 830 require the contractor responsible for a DOE nuclear facility to analyze the facility, the work to be performed, and the associated hazards and to **identify the conditions, safe boundaries, and hazard controls necessary to protect workers, the public and the environment from adverse consequences.** These analyses and hazard controls constitute the safety basis upon which the contractor and DOE rely to conclude that the facility can be operated safely.”

To make this real, the DNFSB substantially attributed a serious **plutonium contamination incident** to TA-55 workers in August 2003 to the lack of a safety basis (a year later, the contaminated room is still not cleaned up). In addition, the DOE itself found that during FY 2003 “LANL

committed 45 violations of Technical Safety

Requirements for its operating nuclear facilities, nearly a four fold increase over previous average violations per year... The numerous violations indicate that LANL has not been complying with operations of its nuclear facilities...”

Clearly, if we are to take Nanos at his word, operations at LANL’s nuclear facilities **should not resume** until their individual safety bases are completed, approved and future compliance guaranteed. Otherwise, one cannot conclude that LANL’s nuclear facilities can be safely operated, but can conclude that the whole stand down is a sham at great taxpayers’ expense.

--Jay Coghlan



cartoon by Jamie Chase

Lab Nuclear Weapons Programs: the "Science" Sucks Too!

LANL's **security and fiscal scandals** under University of California management are well known. For its cultural survival under continuing UC management the Lab is now **relying upon the "excellence" of its science**. Seventy-nine percent of DOE funding for LANL in FY 2005 is to be for the Lab's core nuclear weapons programs. Therefore, "excellent science" at LANL is mostly synonymous with its nuclear weapons programs. How well then does UC manage LANL's nuclear weapons programs?

A DOE appraisal of UC performance at LANL for FY 2003 provides a great deal of insight. It notes that "LANL needs to demonstrate a greater commitment to the enduring weapons stockpile," which are the weapons that now exist. This implies that the Lab is **too focused on new modifications and designs, at the expense of stockpile maintenance**. The House Appropriations Committee shares this view. It reported in June that "the objective of the [DOE-wide] program was to advance the most extreme new nuclear weapon goals irrespective of any reservations expressed by Congress... The Department's obsession with launching a new round of nuclear weapons development runs counter to those priorities" of stockpile maintenance and preserving the Nation's "integrity" while trying to convince others to abandon their WMDs.

DOE gave UC an "excellent" rating for the "Mission" portion of the FY03 LANL management contract. That rating was likely **politically compelled**, given the **many specific deficiencies noted by the appraisal**. For example, LANL failed to provide DOE with data on the plutonium pits surrounded by high explosives for submarine-launched nuclear warheads, while the development of "metrics" for the H-bomb components was "very slow." DOE also noted that the Lab's failure to "communicate" with the Department over its nuclear weapons programs was a "long-standing issue." Additionally, LANL had to radically scale back its supercomputing efforts from four 3-D computer weapons codes to two 2-D weapons codes.

DOE states that "The laboratory's most significant

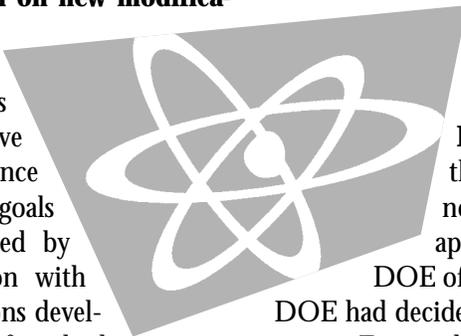
accomplishment during FY03 was restoring this nation's ability to manufacture certifiable [plutonium] pits" (the "triggers" of today's thermonuclear weapons)--but this is a game in semantics. In FY 2000 the goal was for LANL to produce a "certified" pit in FY 2001 deployable to the stockpile, rather than a "certifiable" pit that ultimately is still just a trial run. \$1.27 billion has been already spent on LANL's pit manufacturing campaign. The new goal for a certified pit is 2007, a **six-year delay** from the original goal, by which time it will cost around **\$1.7 billion**. And this is LANL's most significant achievement in FY 2003?

Explosive "hydrotest" experiments with surrogate plutonium pits, long deemed to be absolutely crucial to "Stockpile Stewardship," have been repeatedly delayed. This has largely has to do with **problems at the Dual Axes Radiographic Hydrodynamic Testing Facility (DARHT)**, which was envisioned in the mid-1980's to cost \$47.5 million and is now **\$270 million and counting**. The appraisal notes how LANL failed to inform DOE of continuing problems at DARHT until after DOE had decided to further fund it.

For much more concerning the deficiencies in LANL's nuclear weapons programs, please see <http://www.nuke-watch.org/facts/nwd/LANLNukeBack083104.pdf>

Conclusion: Systemic problems pervade LANL's nuclear weapons programs such that the very quality of those programs, whether you support them or not (and we do not), should be questioned. These **deficiencies are poorly known and understood by Congress and the public**, but should be carefully weighed in any decision to renew UC management of LANL. There is always the question of the proper and efficient use of taxpayers' money, a test we believe that LANL fails under UC management. Even more seriously, should the **poor quality of LANL's nuclear weapons programs with respect to ensuring stockpile maintenance** eventually contribute to a national decision to **return to full-scale testing**, the costs can be truly incalculable.

--Jay Coghlan



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Please send us your most munificent possible contribution today, so that we may continue to toil on your behalf against nuclear proliferation, treaty-busting, toxic pollution and other bad behavior by government and industry!



LANL's Technical Area 18: The Good, the Bad and the Ugly News

The end could be in sight for one of most dangerous places in Northern New Mexico. Situated at the bottom of an indefensible canyon, Technical Area (TA)-18 at Los Alamos National Laboratory (LANL) contains tons of nuclear materials and repeatedly has failed security tests. A recent DOE "pre-decisional" TA-18 Closure Plan, leaked by the Project on Government Oversight and available at www.pogo.org, finally outlines an overall TA-18 closure strategy. The plan includes **removing weapons-grade plutonium and enriched uranium from TA-18, while keeping some criticality experiments as interim operations until they are also moved.** Criticality experiments use "assemblies" of enriched uranium and/or plutonium to create self-sustaining nuclear chain reactions. These experiments are used to validate nuclear weapons computer codes, to conduct nuclear safety training, and to calibrate alarms and dosimeters.

The good news for Northern New Mexico is that an estimated 3 tons of "Special Nuclear Materials" are to be moved to a new hideout at the Nevada Test Site.

The bad news is that there are no plans to move 20 tons of natural and depleted uranium and thorium from the canyon, which is a flood plain.

The ugly news is that TA-18 is planning to run high level criticality experiments in 2005, with lower level criticality experiments continuing through 2009, when the last of these experiments is finally to be moved to Nevada. The facilities containing the critical assemblies offer **no confinement in the event of an accidental radiological release.** The experiments currently **lack federally approved safety controls** while, at the same time LANL has a **history of neglecting safety rules at TA-18.** An independent federal nuclear safety board observed in May that operator errors could result in an assembly being overloaded with too much fissile material (i.e., material capable of sustaining a nuclear reaction). The board further observed that it is possible that the resulting **uncontrolled assemblies could vaporize plutonium, causing fatal doses outside of LANL boundaries.** Because the closure plan calls for TA-18 eventually to cease operations, no future safety upgrades for the facilities are being planned.

Congressman Tom Udall (D-NM) believes the potential consequences are too severe to ignore and has written a letter to the DOE Secretary requesting that TA-18 not conduct criticality experiments until all federal safety guidelines are met. Another member of the posse, the Santa Fe City Council, has passed a resolution seeking to do the same. Let's stick by our guns and run this potential threat out of town, once and for all!

--Scott Kovac



Environment Department Wins on Cleanup



In early September the New Mexico Environment Department (NMED), DOE and the University of California (as LANL's manager) entered into a **NMED-initiated "Consent Order"** after more than a year and a half of protracted negotiations. In 2002, DOE and UC filed four different lawsuits against a draft Order. The stated purposes of this final Order are to determine the extent of contamination at LANL, the necessary remedies, and to implement "corrective measures." This Order is not perfect. In many ways it can be characterized as a plan for yet more plans. Nevertheless, in our view NMED is to be congratulated for hanging tough and creating **legally enforceable mechanisms for future State-mandated cleanup.** The only other alternative is the Lab's own dismal plans for not cleaning up.

NMED succeeded in a number of important points. First, it was able to stipulate **financial penalties** in the event that LANL fails to meet the Order's extensive schedule of milestones. The Environment Department managed to wring from DOE "**voluntary**" reporting of the radioactive portion of mixed (i.e., both hazardous and radioactive) contamination at LANL, while reserving its **right to enforce that in the future.** Finally, through the Order, NMED was able to break some new legal ground by assuming jurisdiction over contamination caused by the specific types of **high explosives** used in nuclear weapons.

There is one big hitch. New Mexico is one of a handful of states that has not received EPA-delegated jurisdiction over **federal surface water quality regulations.** The draft Order had included surface water monitoring requirements, a possibly tenuous legal position given that lack of jurisdiction. Because in the end DOE did want to settle with NMED it proposed a "Federal Facilities Compliance Agreement" (FFCA) between DOE and EPA. This agreement would allow for input from NMED on surface water issues, but nevertheless the **enforcing power would remain the EPA.** The final Order does not include surface water monitoring requirements, but the hope is that EPA would be more far more motivated to enforce because of the agreement. NMED Secretary Ron Curry has said he will not finalize the Order until the FFCA is finalized, a draft of which is expected to be released this month.

In closing, **Ron Curry and NMED staff deserve a big thumbs up for winning this Order.** Having said that, the watchdogs intend to see that it really translates into State-mandated cleanup in the future. --Jay Coghlan

Whassup With WIPP?

For those of you just tuning into the whole nuclear waste disposal thing, the Waste Isolation Pilot Plant, or WIPP, is currently the only deep underground disposal site in the world for transuranic (TRU) waste. TRU waste is mostly produced during nuclear weapons manufacturing and is typically contaminated with plutonium. But WIPP can also accept waste that is contaminated with both plutonium and hazardous waste, which makes this a rather toxic dumpsite. The WIPP site is near Carlsbad in southeastern New Mexico. It was opened under dubious circumstances in 1999 when Los Alamos National Laboratory sent its first shipment of waste without a proper State permit, despite longstanding DOE promises to New Mexico and public outcry.

There are two regulating authorities over WIPP since the facility can accept waste contaminated by both radioactive and hazardous constituents. For the radiation side there is the federal Environmental Protection Agency (EPA). For the hazardous side there is the New Mexico Environment Department (NMED). Both agencies have been busy little beavers, but we'll get to that in a moment.

The "hot" topic lately concerns the Idaho National Engineering and Environmental Laboratory (INEEL), notorious for years now in its questionable practices of waste disposal at WIPP. Its most recent antics are just another notch in its bedpost. In mid-July, the Department of Energy (DOE) voluntarily stopped shipments from Idaho because INEEL had not been properly testing its waste to make certain it met waste disposal regulations. The problem started when INEEL decided to toss some waste drums that *had not* been adequately tested into shipments of drums that *had* been properly tested. Oops! Reports also surfaced stating that DOE knew for a full three weeks that the waste was not fully certified before they stopped INEEL shipments to WIPP. Way to look out for New Mexicans, DOE!

Of course, DOE denies these allegations. However, NMED has stated that it saw evidence as early as mid-June of problems with the INEEL shipments. The 2004 problem drums may have been shipped over several months, possibly as early as March. As its investigations continued, NMED discovered that problematic drums were likely shipped in 2002 and 2003 as well.

Clearly INEEL has a habitual problem with characterizing and certifying waste before it comes to New Mexico. So of course the State stepped up and read

DOE and INEEL the riot act, right? Well, that depends on your definition of the riot act. The State did fine DOE a record \$2.4 million, but as of September 20 INEEL has been given the OK to start sending waste to WIPP again. Really, NMED, do you honestly believe that INEEL is ready to ship to WIPP again?

Ironically the shortcuts ended up costing INEEL in the long run. Two hundred and seventy-one shipments were planned from INEEL in FY04 (fiscal years end on September 30)-- but as of September 19 INEEL had only been able to send 34 shipments to WIPP. Nationwide, DOE will probably again fall far short on its intended waste shipments to WIPP from all sites.

In other events, the EPA is now knee-deep in its WIPP recertification process. When the facility was first certified in 1998 a condition was that WIPP be recertified every five years during its operational lifetime to ensure compliance with safety requirements protecting human health and the environment. The EPA recertification process should be completed sometime in 2005.

DOE recently submitted a permit modification request to NMED to deal with the high-level nuclear waste disposal issue that was mentioned in the last issue of the *Watchdog*. DOE submitted its request without properly identifying over 100 million gallons of high-level radioactive liquid waste and sludge that can be found at Energy Department sites across the country. Current federal law prohibits high-level nuclear waste from being dumped at WIPP, but laws can be changed. The comment period for this request ended September 7; now we will see how NMED responds to the public's vocal outcry over this modification request.

--Geoff Petrie

See:

Fleck, John (2004, Sept. 20). State OKs More WIPP Shipments. *Albuquerque Journal*, <http://www.abqjournal.com/news/state/226542nm09-21-04.htm>

Fleck, John (2004, Sept. 1). State Seeks Record Fine in WIPP Case. *Albuquerque Journal*, <http://www.abqjournal.com/news/state/216172metro09-01-04.htm>

Fleck, John (2004, July 26). State: DOE Knew WIPP Loads Bad. *Albuquerque Journal*, <http://www.abqjournal.com/scitech/202902science07-27-04.htm>

Petrie, Geoff (2004, June). High-Level Waste: a ruse by any other name? *Watchdog* Volume 5, Issue 2.

Advanced Biolabs at Nuclear Weapons Sites

The Department of Energy wants to begin operating advanced bioresearch facilities at the national labs at Los Alamos (LANL) in New Mexico and Lawrence Livermore (LLNL) in California. These new biolabs are designated "Biological Safety Level (BSL)-3," which means they are cleared to work on deadly diseases such as anthrax, Q fever, plague, and tularemia, plus genetic modifications. Only a BSL-4 category is higher, reserved for incurable disease such as Ebola.

Issues of concern include:

- The inherent dual-use nature (i.e., defensive and/or offensive) of today's biotechnologies.
- The bad international precedent of locating advanced biolabs at secret nuclear weapons sites.
- The Bush Administration's abrupt termination in 2001 of implementation of the international Biological and Toxins Weapons Convention.
- The Labs' poor track records in security, safety and environmental issues.
- The proliferation of advanced biofacilities across the country, giving greater access to and knowledge of bioagents (the strain used in the October 2001 anthrax attacks originated from an U.S. government lab).
- Finally, the lack of transparency in the biological programs at both Los Alamos and Lawrence Livermore Labs.

Citizen Efforts against the LANL and LLNL Biolabs

In October 2001 Los Alamos issued a draft BSL-3 environmental assessment (EA), which is the lowest level of public review under the National Environmental Policy Act. After receiving some 300 formal public comments, overwhelmingly in opposition, LANL nevertheless chose to go ahead and build the facility, the first in the DOE nuclear weapons complex. Following its own assessment, LLNL gave itself the green light in December 2002 to operate its BSL-3. In effect, both labs wrote themselves blank checks for the broad range of pathogens they might use. They also failed to address security concerns, such as intentional sabotage or theft (i.e., a disgruntled employee or "rogue scientist") or terrorist acts. Particularly striking was that the LLNL assessment did not meaningfully analyze the serious seismic concerns in the active Livermore area. In response, Nuclear Watch New Mexico and Tri-Valley CAREs (TVC), a citizens group based in Livermore, CA, jointly filed a lawsuit in August 2003 in the federal district court of northern California. In brief, NukeWatch and TVC argued that more comprehensive environmental impact statements (EISs) were required for both biolabs.



anthrax

The Course of the Lawsuit

In December 2003 the Court barred DOE from introducing "select agents" (those pathogens historically used in bioweapons) at both facilities until a judicial decision was reached. In late January DOE abruptly withdrew its formal approval of the LANL BSL-3, claiming that it had become aware of "new circumstances and information" while disavowing any connection to our lawsuit. DOE also stated that it would prepare a new draft EA (still yet to be released), which could lead to an EIS. Thus our lawsuit has already substantially prevailed with respect to its impacts on the LANL facility. Unfortunately, on September 10 the judge ruled against the remaining counts in our lawsuit, allowing DOE to proceed with its plans at LLNL. An appeal by NukeWatch and TVC is likely.

Current Status of the LANL and LLNL Biolabs

Construction of the LANL BSL-3 facility was completed in Fall 2003. The facility's new draft environmental assessment is expected as early as November (more likely around New Year's). This will give the public another opportunity to submit formal comments, always critical to building a legal record. If DOE acts without further delay (such as no further stand-downs to Lab operations) the LANL BSL-3 facility could be operating as early as Spring 2005 (approximately a year behind schedule). NukeWatch will be carefully analyzing the legal adequacy of the new EA, and strongly encourages interested citizens to submit formal comment. **Stay posted to www.nukewatch.org for news of its release, our analysis and suggested comments.**

The LLNL BSL-3 building is a prefab for which site and utilities prep has been completed. It is now possible that it could be soon installed, undergo procedural tests and begin operations in early 2005. Any appeal of the Court's ruling could seriously disrupt that schedule.



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mission statement

The mission of Nuclear Watch New Mexico is to provide timely and accurate information to the public on nuclear issues in the American Southwest, and to encourage effective citizen involvement and activism in these issues. We seek to promote greater environmental protection, safe disposition of radioactive wastes, and federal policy changes that will curb the proliferation of nuclear weapons.

Inside this issue: Stand-Down of LANL's Programs for Security and Safety Reasons; Sloppiness in Weapons Programs; Events at TA-18 and WIPP; Hats Off to Environment Department for Victory

What To Do!

- The House Appropriations Committee completely cut DOE-requested funding for a "Robust Nuclear Earth Penetrator," "mini-nukes" and an industrial-scale bomb factory (the "Modern Pit Facility"). Tell your Senators to do the same (especially NM's Senators Domenici and Bingaman)!
- While you are it, let Governor Richardson know that you oppose the proposed uranium enrichment plant in New Mexico on the basis that there is already a global glut of enriched uranium and that there is no clear disposal path for the facility's wastes.
- Stay posted to www.nukewatch.org for news of the release of the new environmental assessment for Los Alamos' advanced biolab, our analysis and suggested comments (see article inside).
- NukeWatch is entering its 5th season of weekly cable access TV shows that address current nuclear issues. You can watch in Santa Fe at 7:30 PM every Sunday on Channel 8. Our shows are also airing in Albuquerque, Taos, Los Alamos and Silver City, NM (call your local cable access station for schedules).
- Most of all, VOTE on November 2 as if your future depends upon it (and it does)! Remember: If you don't vote, don't *itch!



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